Appendix V

TRANSPORTATION, DISTRIBUTION AND LOGISTICS YOUTH APPRENTICESHIP

LOGISTICS/SUPPLY CHAIN MANAGEMENT (SCM) PATHWAY STORAGE & WAREHOUSING (UNIT 14)

Unit 14: Logistics/Supply Chain Management (SCM) Pathway Storage & Warehousing

Competency

1. Operate tools and equipment safely

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Operate only equipment trained on
- Choose correct tool or equipment for the task
- Verify tool/equipment is available for use and in working order
- Verify tool/equipment is current for preventative maintenance and/or calibration
- Verify safety equipment and any Personal Protective Equipment (PPE) needed for tool/equipment use
- Operate tool/equipment safely with guarding devices if applicable in the manner required for the job task
- Monitor tool/equipment for safe operation while operating
- Follow facility procedures for clean up and shut down after use
- Perform any required preventative maintenance procedures
- Investigate and promptly reports abnormal tool/equipment conditions
- Properly shut down and label any tool/equipment that is not operating as expected, if applicable
- Follow Lock Out/Tag Out procedures as applicable
- Document use and maintenance as required

Learning Objectives

- List the various tools and equipment used at your worksite
- Outline applications of each tool and equipment
- Describe and demonstrate the safety requirements for each tool and equipment
- Discuss start up and shut down procedures for each tool/equipment you will operate
- Explain the purpose of preventative maintenance
- Describe emergency shutdown procedures for the tool/equipment you will operate
- Explain how to recognize and address malfunctions for the tool/equipment you will operate
- Describe how to recognize wear and tear on equipment components
- List the OSHA and other regulatory requirements as they apply to the equipment that you operate
- Describe proper techniques for lifting loads
- List the safeguards that apply to the equipment used in your facility for tools, automated machines, material handling equipment, and lifts
- List which tools and equipment require safety certification
- Explain Lock Out/Tag Out indications and procedures in your facility

Comments:

Unit 14: Logistics/Supply Chain Management (SCM) Pathway Storage & Warehousing

Competency

2. Assist to plan for customer order using production and logistics documents

Performance Standard Condition

Competence will be demonstrated

- at the worksite
- while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

- Estimate the space, quantity to store, cost, and/or materials needed for storage
- Map the production flow of the materials and inventory
- Review documents such as facility site constraints, production schedules, work orders, staffing tables, inventory levels, etc.
- Discuss solutions to meet customer order including transportation and inventory costs
- Set schedule for acquisition and deadline dates of inbound materials

Learning Objectives

- Analyze a supply and distribution system
- Compare and contrast the different types of production process flow design advantages, constraints, and costs
- Describe facility design issues and their impact on resource planning
- Describe the steps in forecasting, planning, scheduling and inventory control that are used to ensure optimum use of capacity and resources
- List types of data used in forecasting the need for goods and services such as data on current and future global/domestic market conditions, data from benchmarking, and data on Industry Trends
- Develop supply forecasts in light of economic, competitive, technology and market and currency trends and conditions that affect procurement
- Describe costs associated with providing a customer service such as labor, materials, & manufacturing.
- Research and identify areas of waste
- Compare and contrast advantages and disadvantage of owning and operating facilities versus out-sourcing

Comments:

Unit 14: Logistics/Supply Chain Management (SCM) Pathway
Storage & Warehousing

Competency

3. Unload materials

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Unload materials safely and according to regulations
- Use loading equipment safely and according to regulations
- Record materials received
- Stage materials received for inspection

Learning Objectives

- Demonstrate how to recognize, handle, and store hazardous materials
- List the regulations pertaining to loading/unloading of materials and supplies
- Describe different kinds of loading equipment and their applicable safety and regulatory use standards
- Identify safety features of loading/unloading equipment

Comments:

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Competency

4. Inspect package for integrity, damage, quality specifications

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Handle materials according to regulations
- Check label(s) to ensure that they meet all requirements
- Inspect package for leaks, rips, tears, holes, etc.
- Record any damage
- Report damage to worksite professional

Learning Objectives

- Become familiar with common hazardous materials labeling and packaging requirements
- Describe how special handling packages are labeled
- List common reasons for materials damage

Comments:

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Competency

5. Check order accuracy against packing slip/purchase order

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Obtain purchase order
- Locate packing slip
- Compare accuracy of order received against packing slip and purchase order
- Verify quality of materials received against specifications
- Report material and/or quality deviations to appropriate parties
- Deliver materials to appropriate staging/storage location according to disposition

Learning Objectives

- Define the purpose of the packing slip, purchase order, requisition
- Discuss the purpose of order reconciliation and receipt
- Explain how order inaccuracies are communicated to appropriate parties
- Identify costs associated with inaccurate or damaged orders

Comments:

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Competency

6. Deliver materials to staging/storage location

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Determine location for item storage or staging
- Move items received safely using equipment properly
- Use good body mechanics when lifting and moving materials

Learning Objectives

- Explain how goods returned to storage are processed for reuse, resale or storage
- Define palletizing
- Describe different methods of warehouse storage and identification
- Discuss bar coding and other warehouse storage solutions
- Discuss the importance of proper shelving procedures when loading in newer items

Comments:

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Competency

7. Store or discard packaging materials as required

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Remove delivery packaging as required prior to final storage
- Store or discard delivery packaging according to procedures

Learning Objectives

- Identify common types of packaging
- Explain costs associated with discarding versus recycling packaging materials
- Discuss legal and compliance issues with recycling packaging materials
- List common types of items that remain in delivery packaging until final disposition

Comments:

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Competency

8. Pull items from warehouse storage location

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Determine location of item needed
- Pull items from warehouse storage location
- Verify item pulled matches description and location of item required
- Notify appropriate worksite professional of any discrepancies

Learning Objectives

- Demonstrate the use of scanners and scales for inventory management and counting
- List common markings found on cartons/containers
- Explain basic guidelines for labeling
- Highlight differences in labeling for dangerous goods

Comments:

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Storage & Warehousing

Competency

9. Store orders for transporting

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Move items to staging area to ready for packaging & delivery
- Store orders in appropriate locations as required

Learning Objectives

- List common storage environments
- Describe common labels used on materials to be readied for packaging
- Compare different areas of the warehouse and their function

Comments:

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Competency

10. Check container and packing materials for labeling

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Prioritize orders to be filled based on management plan
- Use packaging methods that keep returns and claims for damage to a minimum
- Verify that outgoing labels have all relevant information
- Check container and packaging materials to verify that they meet regulatory requirements for order
- Check container to verify that packing has proper labeling and meets shipping and safety regulations
- Handle orders according to regulations
- Notify worksite professional when defective contents are identified

Learning Objectives

- Explain how packing materials determine packing requirements
- Describe packing material
- Explain how customer shipping instructions determine packing requirements
- Describe methods of export packing
- Describe advantages and disadvantages of intermodal containers
- Demonstrate how to recognize, handle, and package hazardous materials
- List the regulations pertaining to loading/unloading of materials and supplies
- Describe different kinds of loading equipment and their applicable safety and regulatory use standards
- Identify safety features of loading/unloading equipment

Comments:

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Competency

11. Verify contents match order and description

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Prepare packing slip
- Compare packing slip to order to materials to be shipped
- Resolve any discrepancies

Learning Objectives

- List common types of information on a packing slip
- Discuss the function of verification at the loading/shipping stage

Comments:

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Competency

12. Isolate defective contents prior to packing

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Inspect packages prior to loading
- Remove any defective, leaking, damaged, or torn items
- Isolate the contents
- Obtain replacement items for shipment
- Inform worksite professional of defects

Learning Objectives

- Describe the purpose of isolating defective items from the warehouse
- List safety regulations to take if leaks are noted
- Discuss the costs involved if defective items were shipped

Comments:

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Competency

13. Load orders

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Load orders safely and according to regulations
- Use loading equipment safely and according to regulations
- Load transportation equipment according to loading plan
- Pack transportation vehicles to ensure no damage to shipment

Learning Objectives

- Demonstrate how to load and store hazardous materials
- List the regulations pertaining to loading of materials and supplies
- Explain how loading plans are created for different types of transportation equipment

Comments:

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Competency

14. Perform cycle counts

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Assist worksite professional to implement monitoring activities to prevent disruption and to ensure movement of inventory in an efficient and cost-effective way
- Monitor transaction of materials and orders
- Perform cycle counts
- Check that cycle counts for raw and finished goods meet established standards
- Monitor inventory accuracy

Learning Objectives

- Describe the methods and importance of monitoring inventory accuracy
- Compare inventory systems
- Identify the main types of inventory
- Identify the costs of maintaining inventory
- Define buffer management
- Describe how production efficiencies related to inventory are maintained
- Explain how proper storage levels are monitored and maintained
- Explain the purpose and function of recalls

Comments:

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Competency

15. Check stock for outdated or damaged supplies

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Obtain computerized listing of outdated supplies if applicable
- Regularly check shelves for outdated or damaged supplies
- Isolate defective supplies from the main inventory
- Assist to investigate possible causes of inventory damage

Learning Objectives

- Discuss how warehouses manage expired supplies/materials
- Explain the importance of regular and periodic checks of supplies
- Discuss possible causes for damage to supplies while in the warehouse & storage facility

Comments:

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Competency

16. Rotate raw materials and stock to minimize old and outdated inventory

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Regularly check inventory for outdated or expired supplies according to the warehouse schedule
- Rotate items on shelves/storage spaces so that older items are used first

Learning Objectives

- Describe common methods for regular and periodic shelf/storage space checks
- Explain the costs associated with not rotating stock
- Describe common systems used by warehouses to manage stock rotation

Comments:

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Competency

17. Respond to recall procedures by removing and discarding inventory according to regulations

Performance Standard Condition

Competence will be demonstrated

- at the worksite

Performance Standard Criteria

Performance will be successful when learners:

- Receive recall notice
- Verify items still in house and items that are shipped
- Notify worksite professional of recalled items already shipped
- Pull recalled items from main inventory
- Dispose of items as required
- Make inventory adjustments

Learning Objectives

- List items that are commonly recalled
- List the federal agencies that commonly initiate recalls
- Describe the purpose of a recall
- Discuss steps that are initiated for recalled items that have been shipped

Comments:

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Competency

18. Assist to examine loss, damage & returns reports for trends

Performance Standard Condition

Competence will be demonstrated

- at the worksite
- while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

- Examine warehouse layout for efficiency
- Examine data pertaining to rotation of materials and orders
- Review store level solutions for risks and opportunities
- Verify inventory rotation data for inefficiencies
- Examine loss, damage & returns reports for trends

Learning Objectives

- Describe floor plans and layouts that make the most efficient use of safe location and position
- Explain how lay out and product codes are used to locate materials
- Describe how storage space available constrains lots sizes and reorder points
- Discuss space utilization monitoring and history as a means to adjust warehouse layouts
- Define and explain the major measures used by a logistics organization to manage and improve performance

Comments: