1 - Make a photocopy of this guide for your training use. Review the outline and choose which part(s) you will use for training. Circle those parts selected or highlight them.

2 - Powered industrial truck operators shall receive initial training in the topics included in this training guide, except in topics which the employer can demonstrate are not applicable to safe operation of the truck in the employer's workplace.

3 - This training guide serves three purposes in training industrial truck operators:

- Formal Instruction: All written material contained herein must be presented to truck operators as formal, lecture-delivered or written instruction. Trainers will need to gather additional information from manufacturers' operators manuals for specific powered industrial trucks to properly deliver training (references are included below where operators manual information is required).
- **Training Exercise:** Items contained herein in bold, italic, type are practical training items. These items are to be demonstrated to the trainee(s) by a qualified trainer(s) (to be determined by the employer). Once properly demonstrated, the trainee must then perform the item as a practical exercise. The trainer(s) must evaluate the trainee's performance and acknowledge the trainee's ability to perform each item as specified in the attached special document.
- Written Quiz Preparation: Trainers can also, if they choose, administer an industrial truck operator's quiz to trainees following training. (See attached document of quiz and quiz answers)

4 - Trainees may operate a powered industrial truck only:

- Under the direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence; and
- Where such operation does not endanger the trainee or other employees.

5 - Read the operator's manual for your truck(s) and become familiar with any and all instructions, warnings and precautions specific to the truck(s) you are operating.

6 - Give special attention to the operating differences between a powered industrial truck and a conventional automobile. Do not confuse the two types of vehicles. Refer to the operators manual for your truck(s) for specific information on operating your truck(s)

7 - Know the proper function and application for all controls and instrumentation for your specific truck(s). Refer to your operators manual for specific details on each truck. After watching your trainer demonstrate how to use all controls and instruments, *demonstrate to your trainer your ability to do so*.

8 - Refer to your operators manual for specific instructions on starting, maintaining and stopping the engine or motor for your powered industrial truck. After watching your trainer demonstrate how to start the truck, *demonstrate to your trainer your ability to properly do so*.

9 - If, after following proper instructions for starting your engine or motor, you are unable to start that engine or motor, arrange for an authorized mechanic to repair the truck. Do not use unorthodox methods to try and start or repair the engine or motor without proper experience.

STEERING AND MANEUVERING

10 - Observe all traffic regulations, including authorized plant speed limits. Maintain a safe distance of approximately three truck lengths from the truck ahead, and keep the truck under control at all times.

11 - Yield the right of way to ambulances, fire trucks, or other vehicles in emergency situations.

12 - Do not pass other trucks traveling in the same direction at intersections, blind spots, or other dangerous locations.

13 - Slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, then travel with the load trailing. After watching your trainer demonstrate how to travel with the load trailing, *demonstrate to your trainer your ability to do so*.

14 - Cross railroad tracks diagonally wherever possible. Parking closer than 8 feet from the center of railroad tracks is prohibited.

15 - Operate the truck under all travel conditions at a speed that will permit it to be brought to a stop in a safe manner.

16 - Stunt driving and horseplay shall not be permitted.

17 - Approach elevators slowly, and then enter squarely after the elevator car is properly leveled. Once on the elevator, neutralize the controls, shut off power, and set the brakes. After watching your trainer demonstrate how to approach an elevator (where applicable), *demonstrate to your trainer your ability to properly do so*.

18 - Motorized hand trucks must enter elevators or other confined areas with load end forward. After watching your trainer demonstrate how to enter an elevator with a motorized hand truck (where applicable), *demonstrate to your trainer your ability to properly do so*.

19 - Avoid running over loose objects on the roadway surface.

20 - While negotiating turns, reduce speed to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion. Except when maneuvering at a very low speed, turn the hand steering wheel at a moderate, even rate. After watching your trainer demonstrate how to turn the truck, *demonstrate to your trainer your ability to properly do so*.

21 - Whenever a truck is equipped with vertical only, or vertical and horizontal controls elevatable with the lifting carriage or forks for lifting personnel, take the following additional precautions for the protection of personnel being elevated:

(A) Use a safety platform firmly secured to the lifting carriage and/or forks.

(B) Provide means whereby personnel on the platform can shut off power to the truck.

(C) Provide such protection from falling objects as indicated necessary by the operating conditions.

VISIBILITY

22 - Look in the direction of, and keep a clear view of the path of travel.

23 - Never set the truck in motion without a clear line of visibility. If the trucks load impedes your forward view, operate the truck in reverse.

FORK AND ATTACHMENT ADAPTATION, OPERATION, AND USE LIMITATIONS

24 - Maintain sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.

25 - Use an overhead guard as protection against falling objects. An overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative of the job application, but not to withstand the impact of a falling capacity load.

26 - Use a load backrest extension whenever necessary to minimize the possibility of the load or part of it from falling rearward.

VEHICLE CAPACITY

27 - Powered industrial truck load limits vary depending upon the type of truck you are using. Read and know the load limits for your truck(s).

VEHICLE STABILITY

28 - Set brakes and wheel blocks in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semi trailer during loading or unloading when the trailer is not coupled to a tractor. Check the flooring of trucks, trailers, and railroad cars for breaks and weakness before they are driven onto.

29 - Set the brakes of highway trucks and place wheel chocks under the rear wheels to prevent the trucks from rolling while they are boarded with powered industrial trucks.

30 - Provide wheel stops or other recognized positive protection to prevent railroad cars from moving during loading or unloading operations.

31 - Fixed jacks may be necessary to support a semi trailer and prevent upending during the loading or unloading when the trailer is not coupled to a tractor.

32 - Provide positive protection to prevent railroad cars from being moved while dockboards or bridge plates are in position.

OPERATOR INSPECTION/MAINTENANCE

33 - If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, take the truck out of service until it has been restored to safe operating condition.

34 - Make all repairs by authorized personnel.

35 - Do not make any truck repairs in Class I, II, and III locations

Note: see Hazardous Locations in this training guide for class location definitions.

36 - Conduct repairs to the fuel and ignition systems of industrial trucks which involve fire

hazards only in locations designated for such repairs.

37 - Disconnect the battery prior to working on trucks in need of repairs to the electrical system. After watching your trainer demonstrate how to disconnect the battery, *demonstrate to your trainer your ability to properly do so*.

38 - Replace all parts of any such industrial truck requiring replacement only by parts equivalent as to safety with those used in the original design.

39 - Do not alter industrial trucks so that the relative positions of the various parts are different from what they were when originally received from the manufacturer, and do not add extra parts not provided by the manufacturer or by the elimination of any parts. Do not do additional counter-weighting of fork trucks unless approved by the truck manufacturer.

40 - Examine industrial trucks before placing them in service, and do not place them in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.

41 - Fill water mufflers daily or as frequently as is necessary to prevent depletion of the supply of water below 75 percent of the filled capacity. Vehicles with mufflers having screens or other parts that may become clogged shall not be operated while such screens or parts are clogged. Any vehicle that emits hazardous sparks or flames from the exhaust system shall immediately be removed from service, and not returned to service until the cause for the emission of such sparks and flames has been eliminated. After watching your trainer demonstrate how to fill the water muffler (where applicable), *demonstrate to your trainer your ability to properly do so*.

42 - When the temperature of any part of any truck is found to be in excess of its normal operating temperature, thus creating a hazardous condition, remove the vehicle from service and do not return it to service until the cause for such overheating has been eliminated.

43 - Keep industrial trucks in a clean condition, free of lint, excess oil, and grease. Noncombustible agents should be used for cleaning trucks. Low flash point (below 100 deg. F.) solvents shall not be used. High flash point (at or above 100 deg. F.) solvents may be used. Precautions regarding toxicity, ventilation, and fire hazard shall be consistent with the agent or solvent used.

44 - Industrial trucks originally approved for the use of gasoline for fuel may be converted to liquefied petroleum gas fuel provided the complete conversion results in a truck which embodies the features specified for LP or LPS designated trucks. Such conversion equipment shall be approved.

FUEL AND OIL CONSIDERATIONS

45 - Do not fill fuel tanks while the engine is running. Avoid spillage. After watching your trainer demonstrate how to fuel the truck, *demonstrate to your trainer your ability to properly do so.*

46 - Carefully wash away or completely evaporate spillage of oil or fuel and replace the fuel

tank cap before restarting engine.

47 - Do not operate a truck with a leak in the fuel system until the leak has been corrected.

48 - Do not use open flames for checking electrolyte level in storage batteries or gasoline level in fuel tanks.

SURFACE CONDITIONS

49 - Slow down for wet and slippery floors.

LOAD COMPOSITION, STABILITY, AND MANIPULATION

50 - Handle only stable or safely arranged loads. Exercise caution when handling off-center loads which cannot be centered.

51 - Handle only loads within the rated capacity of the truck.

52 - Adjust long or high (including multiple-tiered) loads which may affect capacity.

53 - Operate trucks equipped with attachments as partially loaded trucks when not handling a load.

54 - Place the load engaging means under the load as far as possible; carefully tilt the mast backward to stabilize the load. After watching your trainer demonstrate how to place the load engaging means, *demonstrate to your trainer your ability to properly do so.*

55 - Use extreme care when tilting the load forward or backward, particularly when high tiering. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. Do not tilt an elevated load forward except when the load is in a deposit position over a rack or stack. When stacking or tiering, use only enough backward tilt to stabilize the load. After watching your trainer demonstrate how to tilt a load, *demonstrate to your trainer your ability to properly do so.*

OPERATING AREA PEDESTRIAN TRAFFIC

56 - Do not drive trucks up to anyone standing in front of a bench or other fixed object.

57 - Do not allow any persons to stand or pass under the elevated portion of any truck, whether loaded or empty.

58 - Do not permit unauthorized personnel to ride on powered industrial trucks. Provide a safe place to ride where riding of trucks is authorized.

59 - Prohibit arms or legs from being placed between the uprights of the mast or outside the running lines of the truck.

NARROW AISLES AND OTHER RESTRICTED PLACES

60 - Maintain a safe distance from the edge of ramps or platforms while on any elevated dock, or platform or freight car. Do not use trucks for opening or closing freight doors. After watching your trainer demonstrate how to maneuver the truck in a narrow aisle, *demonstrate to your trainer your ability to properly do so.*

RAMPS AND SLOPED SURFACES

61 - Ascend or descend grades slowly:

- When ascending or descending grades in excess of 10 percent, drive loaded trucks with the load up grade.
- On all grades tilt the load and load engaging means back, and raise them only as far as necessary to clear the road surface.

62 - After watching your trainer demonstrate how to ascend and descend a grade with and without a load, *demonstrate to your trainer your ability to properly do so.*

OPERATION IN CLOSED ENVIRONMENTS

63 - Where possible, do not operate powered industrial trucks in closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.

64 - If operation in closed environments is required, operators must wear proper respiratory protection (see respirator protection guide).

OTHER ENVIRONMENTAL CONDITIONS

65 - Keep fire aisles, access to stairways, and fire equipment clear.

66 - Properly secure Dockboard or bridgeplates before they are driven over. Drive over Dockboard or bridgeplates carefully and slowly and never exceed their rated capacity.

SAFETY GUARDS

67 - High lift rider trucks shall be fit with a properly manufactured overhead guard, unless operating conditions do not permit.

68 - If the type of load presents a hazard, equip fork trucks with a properly manufactured vertical load backrest extension.

LIGHTING FOR OPERATING AREAS

69 - Where general lighting is less than 2 lumens per square foot, provide auxiliary directional lighting on the truck.

UNATTENDED INDUSTRIAL TRUCKS

70 - When a powered industrial truck is left unattended, fully lower load engaging means, neutralize controls, shut off power, and set brakes. Block wheels if the truck is parked on an incline. After watching your trainer demonstrate how to neutralize the truck, *demonstrate to your trainer your ability to properly do so.*

71 - A powered industrial truck is unattended when the operator is 25 ft. or more away from the vehicle which remains in his view, or whenever the operator leaves the vehicle and it is not in his view.

72 - When the operator of an industrial truck is dismounted and within 25 ft. of the truck still in his view, the load engaging means shall be fully lowered, controls neutralized, and the brakes set to prevent movement.

HAZARDOUS LOCATIONS

73 - Use only approved industrial trucks in hazardous locations. Ask your employer about any operating restrictions applicable to your company's operations.