### **ATTACHMENT E1**

# (OCONUS PACIFIC/EUROPE) FIRE PREVENTION AND WAREHOUSE STANDARDS

#### A. INTRODUCTION

- 1. Fire prevention and warehouse standards are prescribed in this attachment and the Defense Transportation Regulation (DTR), Part IV. Since it is not feasible to list all criteria which make a warehouse satisfactory, the decision as to adequacy will be a matter of judgment by the inspecting official. The primary objective is to ensure that the warehouse will afford proper protection to property and does not prevent the Transportation Service Provider (TSP)/agent from performing the required services. Host country standards, practices, and customs will be taken into consideration in determining the adequacy of a warehouse. If host country standards, practices, and customs conflict with the standards contained in the DTR Part IV, exceptions to policy may be granted by the Defense Personal Property Management Office (DPMO) -Pacific or European Office, through coordination with the local Personal Property Shipping Office (PPSO), when deemed in the best interest of the Department of Defense (DoD).
- 2. All TSPs, agents, and contractors will cooperate fully with local fire departments to obtain maximum technical assistance in fire prevention and protection. An annual inspection by the local fire department will be made to ensure compliance with local and national fire ordinances.
- 3. PPSOs will utilize the standards established by this attachment and DTR Part IV as a guide when conducting semi-annual warehouse inspections (utilizing the DD Form 1812).

#### **B. SPRINKLER AND FIRE-DETECTION SYSTEM**

- 1. All warehouses will have an adequate source of water for fire-fighting purposes and a responsive fire department. Adequacy of the water supply, sufficient water pressure and fire department response will be based upon statements provided by the local/Host Nation (HN) official. Only warehouses equipped with one of the following systems will be approved for storage of DoD shipments:
  - a. Fully automatic supervised sprinkler system or United Laboratory (UL)-approved fire suppression system. In the event of fire, this system will operate automatically and sound an alarm from a central control point, which will be manned 24 hours a day. Such a point could be a security post, or the local fire department, or police station. An alarm sounding at a home, at a watchman station, or a system that merely sounds outside the warehouse does not meet the definition of a supervised system.
  - b. Fully automatic unsupervised sprinkler system or UL-approved fire suppression system. In the event of fire, this system will be set in operation automatically. Unlike a supervised system, this system will not sound an alarm at a central point.
  - c. Supervised detection and reporting system which is activated automatically and which sounds an alarm at a central point manned 24 hours a day, recognized by the local fire department or HN official as adequate. This system is an acceptable alternative when the water pressure level precludes a sprinkler system. However, this system must have an adequate water supply and a responsive fire department that are deemed acceptable by the DPMO-Pacific/Europe in coordination with the local PPSO.
- 2. Fire fighting/evacuation plan will be clearly written and prominently displayed. The fire plan will indicate the configuration of pallets, aisles, working areas, office space, and of wall clearance.

3. Periodic inspection (semi-annually as a minimum) will be conducted by the PPSOs to verify that the fire detection system in use is properly maintained in accordance with (IAW) local requirements.

#### C. WAREHOUSE CONSTRUCTION AND UTILIZATION

- Warehouse construction and utilization must conform to the more stringent requirements of the
  host country ordinances and national building codes, or this instruction. Notice will be given to
  prevention and protection requirements such as minimum clearance above stacks, width of aisles,
  accessibility to fire aisles, distribution of fire extinguishers, and outside storage of combustible
  materials.
- 2. Electrical service wiring, fixtures, etc., will conform to the local/national electrical codes.
- 3. Roofing must be of a sufficient strength to withstand high winds (typhoon or hurricane force), as specified in the local/national building codes.
- 4. The warehouse site will be located so as to prevent flooding. If the warehouse is located in an area that is subject to flooding, approval of the contractor's flood proofing plan will be submitted to DPMO-Pacific/Europe.

#### D. FIRE EXTINGUISHERS

Fire extinguishers will be maintained in proper working order and inspected IAW local/national fire standards. Only recognized and approved fire extinguishers will be used. Fire extinguishers must be conspicuously located and signs identifying locations must be easily seen and posted.

## E. FIRE PREVENTION/HOUSEKEEPING

The following will be verified during the pre-award survey and subsequent semi-annual inspections:

- 1. Shipments are not exposed to hazardous materials or operations inside or outside the warehouse.
- "NO Smoking" signs are conspicuously posted in all storage areas and that no smoking
  restrictions are rigidly enforced. Smoking is prohibited while working inside the warehouse or
  loading zones. The "NO Smoking" signs will be bilingual or multilingual to meet local
  requirements.
- 3. Authorized smoking areas that are located within the warehouse will have proper container-type ashtrays or sand buckets. Metal container-type waste receptacles used for the collection of all smoking materials will have metal lids. No overstuffed furniture or non-fire resistant carpeting will be permitted in a designated smoking area. Break rooms, lunchrooms, and offices must be checked prior to closing each evening to ensure that all smoking materials have been properly disposed.
- 4. Fire plans will be posted in the warehouse area. They will contain specific instructions on:
  - a. How to call local fire department.
  - b. How to use emergency fire-fighting equipment.
  - c. Location of fire-fighting equipment.
- 5. Main aisles (generally not less than 8 feet) are necessary to provide a means of exit and manual firefighting. All aisles will be kept free of storage and other materials, which could restrict free movement.
- 6. Fire lanes of sufficient width to permit access for fire-fighting equipment will be maintained around warehouse exterior.

- 7. Parking areas and driveways approaching the warehouse must be maintained to allow easy access by firefighting personnel.
- 8. Parking of gasoline and electrical powered Material Handling Equipment (MHE) is not permitted inside the warehouse unless suitable non-hazardous locations, readily accessible to a suitable building exit, are used and such location does not conflict with other local or national fire standards.
- 9. Parking of gasoline and electrically powered MHE, trucks, tractors, trailers, vans, storage of packing material, pallets, containers and other combustible material on or near loading docks, under awnings, canopies, or within 20 feet of the warehouse is not permitted during non-business hours.
- 10. Internal combustion driven equipment (e.g., gasoline) will not be repaired, maintained, or stored within the warehouse area. Forklifts and other similar self-propelled MHE with internal combustion engines will be equipped with a mounted fire extinguisher.
- 11. Power equipment such as sweepers, pallet jacks, and forklifts are operated and/or garaged IAW DoD standards unless local or national host country codes and standards are more rigorous.
- 12. A five-foot clearance will be maintained between parked equipment (e.g., forklifts) and any combustible material. Aisles and exits for immediate removal of equipment in case of emergency will be kept clear at all times.
- 13. Storage of any flammable liquids (including paint) inside the warehouse is prohibited. Flammables and combustibles must be stored in a separate locker or locked room that is not exposed to the main warehouse. Liquefied petroleum (e.g., propane, butane, ethane, ethylene, propylene, isobutane, butylene) cannot be stored in the warehouse.
- 14. Recharging of batteries in the warehouse is prohibited except in a designated area with adequate ventilation to disperse the explosive gases generated. DoD standards or local/HN country safety requirements must be maintained.
- 15. Oil fired space heaters are not permitted inside the warehouse. Any use of a portable electric heater will be closely monitored. Extension cords/"trouble lights" will not be used in lieu of permanent approved wiring. Approved extension cords can be used with hand-operated power equipment (e.g., drills, saws), but must be unplugged when not in use.
- 16. Heating, electrical, plumbing, and other systems are serviced at least annually, are maintained in sound condition, and meet all requirements of local/national ordinance codes, whichever is more rigorous.
- 17. Adequate aisle must be maintained for access to sprinkler controls. There will be no obstructions within 18 inches of sprinkler heads.
- 18. High fire-hazard type industry or facility (e.g., paint shops) equipment material storage, or trash will be separated from warehouse by firewalls.
- 19. In the event of fire, smoke, or associated water damage to DoD shipments, the responsible TSP/agent will immediately notify the responsible PPSO.
- 20. All access windows and doors will provide sufficient protection as to prohibit forced entry. Locking devices will have, as a minimum, a double locking system. The door with the double lock system must be metal, solid wood, or properly reinforced. Equipment and exterior areas will be provided maximum security.
- 21. A shipment locator system will be maintained. To be effective, recommend records of the shipment locator system be completed in duplicate, that is, identical container identification

information should be available in the warehouse proper as well as in the office jacket file/chart. A dual shipment locator system will provide protection should the records in one area be destroyed. Testing of the adequacy of the shipment locator system will be accomplished during semi-annual inspections.

- 22. All shipments will be containerized and stored on skids, elevated platforms or similar aides which provide a 2-inch minimum clearance from the floor to the bottom-most portion of the container and at least a minimum of 18 inches from exterior walls. Further, blocks of storage containers will not exceed 16 feet in any direction without an 18-inch fire lane dividing such blocks from adjacent blocks.
- 23. Warehouses will be maintained in a clean condition. Litter from work performed in the warehouse will be cleaned up and removed by the end of each workday.
- 24. Grass, shrubs, and bushes will be maintained so as not to present a fire-exposure hazard within a 50-foot radius of the warehouse. No trash will be burned within 75 feet of the warehouse. Accumulated trash will be stored in covered 55-gallon steel drums or in an acceptable container until disposed of by burning (subject to local laws) or by refuse collection. Failure of the municipal refuse collection system to pick up refuse at the warehouse will not be accepted as an excuse for excessive trash accumulation.
- 25. Only metal containers with metal lids can be used for trash collection. Trash will be kept outside the warehouse whenever possible. Smoking materials will not be placed in trash containers.

#### F. OTHER CONSIDERATIONS

- 1. The TSP/agent/contractor facility will be separated from other occupants of a jointly occupied building. When multiple occupancy of a warehouse exists, there will be a separation by a solid wall or partition having a fire resistance rating of not less than 1 hour. A solid wall is defined as a closed structure from floor to ceiling except that sufficient space may be allowed to permit the operation of a centrally controlled fire detection system. A standard firewall is of masonry brick or cement block. As a minimum, construction may be of no less than 2"X 4" framing (wood or metal studs) on no greater than 16-inch centers, fire stopped, covered solidly on both sides with no less than 5/8-inch thick sheetrock, type "X" gypsum board or other similar fire resistant materials, providing for permanent type construction. Local/national material standards will be accepted when they meet or exceed DoD standards. Metal partition does not constitute a firewall.
- 2. When the TSP/agent/contractor facility is adjoined by an occupant engaged in a hazardous operation, a judgment by the inspecting official will be made to determine whether or not the hazard is of such a nature that entry or continued participation of the facility in the DoD program should be allowed.

## **G. DEVIATIONS**

Any questions concerning procedures established by this enclosure may be referred to DPMO-Pacific at DSN 437-3741/3141 or Commercial 808 787-3741/3141; facsimile, extension 3221 or DPMO-Europe at DSN 314-552-5330, Commercial 011.49.611.143.552.5330.