

# **MAINTENANCE GUIDEBOOK I - MAINTENANCE PROGRAM**

## **CHAPTER FIVE - PREVENTIVE MAINTENANCE**

### **SECTION A PROGRAM**

The intent of preventive maintenance (PM) is to ensure that the affected facilities, equipment, and systems remain in good operable condition at all times. PM minimizes the need for regular maintenance and extraordinary repairs, and extends the lifetime of facilities, equipment, and systems. Therefore, it should not be considered an extra load for the maintenance staff, or a prohibitive budgetary limitation.

A good PM program will allow the maintenance department to be proactive, rather than just reacting to emergencies and resident requests. This reduces the number of work orders, which results in less work load on the maintenance staff and more satisfaction among residents.

### **SECTION B SCHEDULED WORK**

All PM scheduled in the annual plan should be carried out on a timely basis to ensure proper functioning of the affected facilities, equipment, and systems. There should be enough flexibility, however, to handle the routine and emergency tasks that come up.

### **SECTION C THE PM SYSTEM**

The complete PM system consists of five basic steps:

1. Identify the facilities, equipment, and systems that require preventive maintenance.
2. Designate the necessary PM for each item and establish PM frequencies.
3. Schedule the PM.
4. Generate PM work orders.
5. Perform the work or contract it out.

#### **1. IDENTIFY FACILITIES, EQUIPMENT, AND SYSTEMS**

The first step in the PM process is to identify the items that need PM. Examples would be buildings, boilers, furnaces, heat pumps, air conditioners, vehicles, and lawn mowers.

## **2. DESIGNATE THE NECESSARY PM FOR EACH ITEM AND ESTABLISH PM FREQUENCIES**

PM for a building may require activities such as painting of wood and metal surfaces, caulking around doors and windows, roof repair, and removal of leaves from gutters. Concurrently, the PM frequency should be determined for all identified items. At least one complete PM cycle should be planned for each fiscal year, scheduled as discussed above. In addition, manufacturers' recommendations and specifications, as well as historical data, should be considered when planning the frequency of preventive maintenance. Work affected by climate or seasonal changes also needs to be identified.

## **3. SCHEDULE THE PM**

The PM schedule should be established for the identified items on the basis of technical recommendations and established sound practices. To the maximum extent possible, the PM should be evenly scheduled; for example, scheduling one-tenth of all PM work items for each of ten months would allow two months for seasonal or other maintenance activities. Additionally, completion of the PM items should allow flexibility and time for the maintenance staff to handle other maintenance work. Work should be scheduled by geographic location; all work at each site should be completed before moving to another. It is important to stay on schedule.

## **4. GENERATE PM WORK ORDERS**

All PM work should be assigned through the work-order system. Each month, work orders should be generated for all PM work scheduled for the following month. The work orders should be given to the maintenance foreman or supervisor prior to the month when the work is to be completed so he or she can plan for and schedule the staff's work. Residents should be given advance notice if the scheduled work will affect them or their units.

## **5. PERFORM THE WORK**

PM work items should be completed during the month as scheduled. However, some occurrences such as emergencies, adverse weather, and extraordinary repairs, may affect completion. Items not completed should have work orders written for the following month. If a 10-month PM cycle is programmed, the two months not scheduled for PM may be adequate to complete the unfinished work, provided seasonal or other requirements permit.

## **SECTION D RECORDS**

HAs should maintain a PM folder for each development's sites, buildings, equipment, and systems. The records should contain a PM schedule for each item, and a log showing the PM work performed and the date. In addition, the records should contain the manufacturer's specifications and recommendations, service and maintenance manuals, historical data, applicable safety measures, and any other work instructions, including a checklist similar to the sample included in Appendix C.

**END OF CHAPTER FIVE**