

MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATIONS
UNITED STATES POSTAL SERVICE



Maintenance Management Order

SUBJECT: Guidelines for Creating Detailed Local
Building Equipment Emergency System
Operational and Preventive Maintenance
Checklists

DATE: August 12, 2019

TO: ALL Maintenance Offices

NO: MMO-101-18
FILE CODE: M, P, P2, M3
wvol:mm18207aa

This Maintenance Management Order (MMO) **supersedes MMO-013-14** and provides local maintenance managers of Maintenance Capable Offices (MCO) with guidelines to develop detailed building equipment Emergency System (EMSYS) Preventive Maintenance (PM) Checklists. In Associate Offices (AO) and Stations/Branches supported by field maintenance operations, this document will be used to create checklists ensuring compliance with EMSYS requirements which is the responsibility of the Senior Postal Official (SPO) per MS-110, Associate Office Postmaster's Facilities Maintenance Guidelines. Attachment 1 provides a table listing equipment and corresponding maintenance guidelines. Attachment 2 provides the EMSYS requirements and tasks.

The EMSYS requirements and tasks in Attachment 2 provide the minimum required EMSYS checks and frequencies recommended by current American National Standards Institute (ANSI) and Occupational Safety and Health Administration (OSHA) publications and should be modified as necessary based on manufacturer recommendations, local conditions, usage, or local ordinances. Ensure all required safety precautions including but not limited to Personal Protective Equipment (PPE), Electrical Work Program (EWP), local Energy Control Procedures (ECP), and Safety Data Sheet (SDS) are added to the locally developed EMSYS checklists.

The development of a facility building equipment EMSYS maintenance plan depends on a complete and accurate inventory. All building equipment that is to be maintained must be identified and listed in the site staffing software application. Failure to accurately inventory the facility's equipment may result in inadequate support resources. The site staffing projection for building equipment maintenance is derived and calculated within the staffing software application and is based on the building equipment inventory, maintenance standards, and frequencies. Station/Branch and Associate Office building equipment entered into the staffing software application does not count toward building equipment maintenance staffing hours because those facilities are maintained by Field Maintenance, and associated staffing hours are calculated in a separate section of the staffing software application. Other equipment or building systems supported by contract or other means, must be listed, but designated as "maintained by contract".

Coordinate checklists so all EMSYS components are inspected at the same time to minimize travel within the facility. For example, Perform the monthly inspection of Emergency Lights, Exit Signs, and Fire Extinguishers at the same time when feasible.

Direct any questions or comments concerning this bulletin to the MTSC HelpDesk, online at <https://tickets.mtsc.usps.gov/login.php> or call (800) 366-4123.

A handwritten signature in black ink, appearing to read "Frank Jackson" with a stylized flourish at the end. Below the signature, the word "Fox" is written in a smaller, simpler font.

Frederick L. Jackson III
Manager
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HQ Maintenance Operations

- Attachments: 1. Emergency Equipment Table
2. Emergency System Guides

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ATTACHMENT 1**EMERGENCY EQUIPMENT TABLE****1.0. EMERGENCY EQUIPMENT TABLE****Table 1-1. Emergency Equipment Table**

ITEM	ACRO.	DESCRIPTION AND REMARKS	PM GUIDE NO(S)
Emergency Eye Wash	EMSYS		EMS-1
Showers, Emergency	EMSYS		EMS-2
Emergency Light (Monthly)	EMSYS		EMS-3
Exit Signs (Monthly)	EMSYS		EMS-4
Generators, Emergency	EMSYS		EMS-5
Fire Alarm Boxes (Manual)	EMSYS	Give mfr. and whether coded or non-coded	EMS-6
Fire Extinguishers, Stored Pressure Type	EMSYS	Give capacity in lbs. and ext. agent (Multi-Purpose, Dry Chemical, or etc.)	EMS-7
Fire Pumps	EMSYS		EMS-8
Emergency Light (Annual)	EMSYS		EMS-9
Exit Sign (Annual)	EMSYS		EMS-10
Ground Fault Circuit Interrupter (GFCI) Electrical Receptacles (Semi Annual)	EMSYS		EMS-11

When creating an Equipment Record in the eMARS Equipment Module, the Site will enter the total number of units on one Equipment Record.

ATTACHMENT 2**EMERGENCY SYSTEM GUIDES****1.0. GUIDE SET EMS****1.1. GUIDE NUMBER EMS-1: EMERGENCY EYEWASHES**

Frequency: Weekly

Special Instructions: Follow the manufacturer inspection and testing requirements, which may include, but not be limited to the following tasks:

1. Ensure access is unobstructed.
2. Verify protective eyewash covers are properly positioned, clean, and intact.
3. Ensure flow is effective and continuous by activating the unit.
4. Verify protective eyewash covers come off when eyewash is activated.
5. Ensure water flows from both eyepieces.
6. Verify flow continues until deactivation or according to manufacturer instructions.
7. Ensure water drains from the equipment.
8. Ensure nozzle and fluid are protected against contaminants and freezing.

1.2. GUIDE NUMBER EMS-2: EMERGENCY SHOWERS

Frequency: Weekly

Follow the manufacturer inspection and testing requirements, which may include, but not be limited to the following tasks:

1. Ensure access is unobstructed.
2. Ensure flow is effective and continuous by activating the unit.
3. Verify flow continues until deactivation or according to manufacturer instructions.
4. Ensure nozzle and fluid are protected against contaminants and freezing.
5. Ensure water drains from the equipment.

1.3. GUIDE NUMBER EMS-3: EMERGENCY LIGHTS

Frequency: Monthly

All emergency lights shall be inspected monthly on an operating route. This inspection is a quick check to ensure the light is in place and will operate. This is done by verifying it is in its designated place and there is no obvious physical damage or condition which would prevent operation. In addition, the test button should be pressed (or light unplugged) for at least 30 seconds to ensure the light illuminates and stays bright.

1. Check for physical damage or any condition that will prevent operation.
2. Clean off corrosion deposits.
3. Press test button or unplug light for 30 seconds.

Ensure light illuminates and stays bright.

1.4. GUIDE NUMBER EMS-4: EXIT SIGNS

Battery Back-Up

Frequency: Monthly

All exit signs shall be inspected monthly on an operating route. This inspection is a quick check to ensure the light is in place and will operate. This is done by verifying it is in its designated place and there is no obvious physical damage or condition which would prevent operation. In addition, the test button should be pressed (or light unplugged) for at least 30 seconds to ensure the light illuminates and stays bright.

1. Check for physical damage or any condition that will prevent operation.
2. Clean off corrosion deposits.
3. Press test button or unplug light for 30 seconds.
4. Ensure light illuminates and stays bright.

1.5. GUIDE NUMBER EMS-5: EMERGENCY GENERATORS

Frequency: Monthly

Application: This guide provides for the operational test of emergency generators. Emergency generators are defined as meeting all of following criteria:

- Permanently installed.
- Manual or automatic transfer switch.
- Provides backup power to a life safety system.

Special Instructions: Have approved fire extinguisher available. Do not allow open flames or smoking in the area. Use only approved safety-type fuel cans. Obtain and review manufacturer instructions and specifications.

1. Drain condensate from bottom of fuel tank and check fuel quality for contamination.
2. Check engine oil level.
3. Check coolant level and inspect for leaks.
4. Inspect engine air cleaner. Replace if dirty.
5. Test and determine specific gravity of starting batteries. Clean terminals. Set proper charge rate after generator has been operated.
6. Examine generator for moisture and/or dirt.
7. Start and operate unit under full load for 1 hour. Ensure the unit is operated under load. If a portion of the building load cannot be connected, use a resistance load.
8. While unit is operating, thoroughly observe operation for indication of defects or possible malfunctions.
9. After unit has operated for one hour, make log entries showing at least the following parameters: engine and generator speed in RPM, operating voltage, operating amperes, engine temperature, engine oil pressure, and hour meter readings.
10. Check lubricant and coolant according to manufacturer instructions to assure unit will be ready to operate in an emergency.
11. Report any needed repairs or observed defects.

1.6. GUIDE NUMBER EMS-6: FIRE ALARM BOXES (MANUAL)

Frequency: Quarterly (Bi-monthly if non-supervised)

Special Instructions: This procedure can cause the activation of an alarm and/or a supervisory signal. Notify the field maintenance manager and the control center or fire department receiving the alarm and/or signal prior to starting work. When alarm systems are connected to municipal systems, test signals to be transmitted to them will be limited to those acceptable to that authority. Record results on the route sheet. Activate a different box on each test.

1. Examine box for damage and legible box number.
2. Check external tamper devices.
3. When practical, remove "Break Glass" and follow instructions for actuating alarm.
4. Confirm proper signal (coded or uncoded) is transmitted to receiving station (Central Control Station, Fire Department, Police Department, etc.).
5. Determine audible alarms or signals (local or general) actuated by the alarm box are operating.
6. Inspect recording register for legibility, time, code number, and number of rounds.
7. On systems with shunt non-interfering circuits, operate one box and then operate another box on each box loop prior to completion of the first cycle. Check for interference at receiving station or recording register.
8. Restore alarm box and accessories to normal position promptly after each test. This includes rewinding, resetting, replacement of tamper devices, etc.

1.7. GUIDE NUMBER EMS-7: FIRE EXTINGUISHER, PORTABLE, STORED-PRESSURE

Frequency: Monthly

All fire extinguishers shall be inspected monthly on an operating route. This inspection is a quick check to ensure an extinguisher is available and will operate. It is intended to give reasonable assurance that the extinguisher is fully charged and operable. When the fire extinguisher annual inspection is completed it is not necessary to perform an additional monthly inspection. If the annual inspection is performed by a contractor, there should not be a route scheduled in eMARS, and scheduling for the monthly route should be adjusted accordingly.

1. Ensure access to, or visibility of, the extinguisher is not obstructed.
2. Verify operating instructions on extinguisher nameplate are legible and face outward.
3. Ensure seals or tamper indicators are not broken or missing.
4. Inspect for obvious physical damage, corrosion, leakage, clogged nozzle, or cut hose.
5. Ensure pressure gauge is within the operable range. For extinguishers without gauges, and with unbroken seals or tamper indicators, determine their fullness by lifting and comparing estimated weight to weight stamped on shell.
6. Verify correct extinguisher for each location by comparing location markings on the shell and mounting.
7. Complete applicable portions of PS Form 4705, Fire Inspection Tag.
8. If any deficiencies are found, correct the deficiency or replace the extinguisher as soon as possible.

1.8. GUIDE NUMBER EMS-8: FIRE PUMPS

Frequency: To be established by the site based on requirements of the local authority having jurisdiction (Fire Marshall).

1. Electric Motor Drive
 - a. Operate pump long enough to observe general performance and pressure delivered.
 - b. Note any unusual sound, vibration, odor, or temperature.
 - c. Feel bearings for vibration and temperature.
 - d. Note packing gland and relief valve operation.
 - e. If pump starts automatically when flow occurs or when pressure drops, start it by activating the flow or pressure mechanism to test the mechanism and pump concurrently.
 - f. Leave pump in ready-to-run condition.
2. Internal Combustion Engine Drive
 - a. Check the fuel supply, oil level, radiator, and battery.
 - b. Operate long enough to bring engine to normal operating temperature.
 - c. Observe the engine, clutch, and pump for abnormal vibrations, leaks, or other obvious anomalies.
 - d. Note pressures, gauge functionality, and relief or safety valves.
 - e. Check pump packing.
 - f. If pump has automatic starting equipment, start it on automatic to test automatic starting equipment and pump concurrently.
 - g. Leave unit in ready-to-run condition.

1.9. GUIDE NUMBER EMS-9: EMERGENCY LIGHTS

Battery Back-up Test

Frequency: Annually

An annual test shall be conducted for a 1.5-hour (90-minute) duration. Equipment shall be fully functional for the duration of the test.

1. Check for physical damage or any condition that will prevent operation.
2. Ensure light illuminates and stays bright.

NOTE

Test multiple emergency lights and/or exits signs simultaneously. Also, perform other annual/monthly fire extinguisher inspections simultaneously when feasible.

SUGGESTED BEST PRACTICE TIPS:

- Notify occupants of emergency light and/or exit sign testing.
- Note exact time emergency light and/or emergency sign breaker is turned off.
- Travel to the vicinity of each breaker's emergency lights and emergency signs to verify they are functional.
- Identify all non-functional emergency lights and emergency signs so work orders can be generated as necessary.
- After 90 minutes have passed, travel to the vicinity of each breaker's emergency lights and emergency signs to verify they are still functional.
- Identify all non-functional emergency lights and emergency signs so work orders can be generated as necessary.

1.10. GUIDE NUMBER EMS-10: EXIT SIGNS

Battery Back-Up Test

Frequency: Annually

An annual test shall be conducted for a 1.5-hour (90-minute) duration. Equipment shall be fully functional for the duration of the test.

1. Check for physical damage or any condition that will prevent operation.
2. Ensure light illuminates and stays bright.

NOTE

Test multiple emergency lights and/or exits signs simultaneously. Also, perform other annual/monthly fire extinguisher inspections simultaneously when feasible.

SUGGESTED BEST PRACTICE TIPS:

- Notify occupants of emergency light and/or exit sign testing.
- Note exact time emergency light and/or emergency sign breaker is turned off.
- Travel to the vicinity of each breaker's emergency lights and emergency signs to verify they are functional.
- Identify all non-functional emergency lights and emergency signs so work orders can be generated as necessary.
- After 90 minutes have passed, travel to the vicinity of each breaker's emergency lights and emergency signs to verify they are still functional.
- Identify all non-functional emergency lights and emergency signs so work orders can be generated as necessary.

1.11. GUIDE NUMBER EMS-11: GROUND FAULT CIRCUIT INTERRUPTER (GFCI) ELECTRICAL RECEPTACLES

Frequency: Semi Annual

All Ground Fault Circuit Interrupter (GFCI) Electrical Receptacles shall be inspected semiannually on an operating route. This inspection is a quick check using the receptacle's built-in test button to ensure the device will trip and reset as designed.

1. Check for physical damage and ensure insulating plate is tight and intact.
2. Press "TEST" button to ensure circuit interrupter activates.
3. Reset circuit interrupter and ensure receptacle works.