Diocese of Laredo

Preventive Maintenance Checklist

This Checklist provides the basic information needed to establish an inspection program and to provide for scheduled preventive maintenance (PM) and capital renewal. Entities of the Diocese will be able to save considerable money by identifying and correcting problems when they are small and also have sufficient time to save for larger capital expenditures such as roofs, parking lots, and air conditioning.

All entities of the Diocese of Laredo should establish a regular program for the preventive maintenance and repair of their facilities and allocate sufficient funds in their annual budget to address needed repairs and capital renewal.

FIRE AND LIFE/SAFETY SYSTEMS

- ✓ Inspect fire alarms/pull handles/emergency exit signs and door releases/fire extinguishers at regular intervals, according to manufacturer specifications.
- Ensure all fire extinguishers have valid inspection date (within last 12-months); schedule inspection if date expired.

COMBUSTION APPLIANCES (GAS STOVES, WATER HEATERS, ETC.)

- ✓ Check for odors from combustion appliances
- ✓ Inspect exhaust components for leaks, disconnections, or deterioration
- ✓ Inspect flue components for corrosion and soot
- ✓ Check range hoods for grease build-up and fire danger

IRRIGATION SYSTEM

- ✓ Check each zone once per month to ensure there are no broken, clogged, or missing irrigation heads.
- ✓ Adjust each head on each zone twice per year to ensure that the system is not spraying in the wrong direction, onto sidewalks, buildings, or paved surfaces.
- ✓ Check controller/timer quarterly to verify correct time & day, correct watering schedule is set, and replace battery if needed.
- ✓ Quarterly check and clean the filter, if so equipped.
- ✓ Quarterly inspect valve covers, valve boxes, and electrical connections.
- ✓ Add mulch to landscape as needed.
- ✓ Always ensure system conforms to correct water restrictions set by local agencies.
- ✓ Though a licensed or manufacturer-authorized professional should inspect fire and life-safety systems, ensure that your certification is up to date, and that reports and paperwork are handy.
- Verify that your fire-protection control panel isn't in "alarm" or "trouble" condition, check that the pressure gauges on the fire suppression agent cylinders are in the green/operable range. Ensure that system piping or conduit is properly anchored, and verify that system nozzles aren't obstructed and allow adequate flow of the suppression agent into the protected space.

ELECTRICAL SYSTEMS

✓ Electrical systems should be inspected by a licensed electrician every 3 to 5 years. PM typically includes checking switchgear, panel boards, and connections, and cleaning and re-torquing electrical-equipment connections. Fusible switch units should be checked to make sure all fuses within the unit are from the same manufacturer and are of the same class and rating. Note that arcing failures occur where connections have been loosened as a result of thermal cycling.

DRAIN TRAPS

- ✓ Pour water down floor drains once per week (about 1 quart of water)
- ✓ Run water in sinks at least once per week (about 1 quart of water)
- ✓ Flush toilets once each week if not used regularly

MOISTURE, LEAKS, AND SPILLS

- ✓ Check for moldy odors
- ✓ Inspect ceiling tiles, floors, and walls for leaks or discoloration (stained ceiling tiles could be an indicator of a roof leak, an HVAC problem, or a plumbing leak. If the water stain gets bigger or is wet after a hard rain, it is indicative of a roof leak; if it is not raining and the A/C is being used, it is possibly due to a frozen condenser or a drain pan that is clogged or overflowing; if it is a steady leak, look for a plumbing leak from a water pipe or sprinkler head)
- ✓ Check areas where moisture is commonly generated (e.g., kitchens, locker rooms, and bathrooms)
- ✓ Check that windows, windowsills, and window frames are free of condensate
- ✓ Check that indoor surfaces of exterior walls and cold water pipes are free of condensate
- ✓ Ensure the following areas are free from signs of leaks and water damage:
 - o Indoor areas near known roof or wall leaks
 - Walls around leaky or broken windows
 - Floors and ceilings under plumbing
 - o Duct interiors near humidifiers, cooling coils, and outdoor air intakes

ROOFING

- ✓ Inspect at least twice a year, and after any severe storm.
- ✓ Create a roofing file for each building; review warranty information.
- ✓ Clear roof drains and downspouts of debris.
- ✓ Ensure downspout splash-plates/ gutter extensions divert water away from foundation by at least 5 ft.
- ✓ Walk the perimeter to examine sheet metal, copings, and previously repaired sections.
- ✓ Check roof-to-wall connections and re-caulk as necessary.
- ✓ For bituminous roofs, check for splits in the stripping plies/joints.
- ✓ Keep traffic off of the roof to avoid membrane damage.
- ✓ Plan an attic moisture survey every 5 years to detect wet insulation or leaks.
- ✓ Trim trees to prevent contact with roofing and walls.

HVAC

- ✓ Inspect at least twice a year, including seasonal start-up and run inspections.
- Seasonal preventive maintenance (PM) of chillers and boilers is involved; industry practice is to have a qualified mechanical contractor provide services.
- ✓ For cooling towers, disassemble screens and access panels for inspection; inspect the tower fill, support structure, sump and spray nozzles, fill valve, gear box, drive coupling, fan blades, and motor bearings; clean starter and cabinet; inspect wiring; check motor starter contacts for wear and proper operation; test the motor and log readings; and check the condition of the sump heater and contactor, and log observations.
- Pumps usually require bearing lubrication at least annually. Inspect couplings and check for leaks. Investigate unusual noises.
- ✓ Air-handling unit maintenance should include cleaning or replacing air filters at least quarterly, based on condition.
- \checkmark Clean condenser of any vegetation and obstructions that may block airflow.

STRUCTURAL

 Inspect at least annually; check for any cracks in the foundation or walls, and signs of water leakage underneath the building.

- ✓ If new cracks appear or if existing cracks enlarge, consult with a structural engineer or foundation repair specialist for inspection and advice.
- ✓ Ensure gutters and downspouts are not clogged and that water drains away from foundation.
- ✓ Remove any tree roots within five-feet of foundation to prevent foundation damage.
- Ensure any air vents for basement or subfloor are not obstructed; also ensure that vents have screen covers to prevent intrusion of animals or insects.
- Check all sump pumps for proper operation and remove any accumulated silt or debris in sump area. Ensure slope of under-floor area diverts water into sump. Check for water entering basement or crawl space (ponding or erosion) and identify source of water; take corrective action to stop water penetration.

PLUMBING

- ✓ Inspect at least annually; investigate any leaks or unusual noises.
- Domestic water booster and circulation pump systems require bearing lubrication at least annually; inspect couplings and check for any leaks.
- Check any water filters or water treatment devices; replace filter if necessary and refill treatment devices if required, or contact contractor for repair or refill as needed.
- ✓ Sump and sewage ejection pumps are replaced on an as-needed basis, but should be checked for function. Exposed pumps should be lubricated annually.

LIGHTING

- ✓ Inspect at regular intervals (at least quarterly), with group replacement of bulbs when lamps fail.
- ✓ Any lighting elements that have transformers, control gear, or accessories, such as spread lenses, glare baffles, or color filters, should be routinely checked.
- Check exterior lights to make sure cables aren't torn; all screws and hardware should be in place and working, and gaskets can be replaced to provide a better watertight seal.
- ✓ Replace any burned-out lamps, and consider group replacement of all bulbs (to create your replacement schedule, calculate lamp life and how often lamps are used).
- ✓ Ensure that each lamp has the same color temperature.
- ✓ Re-aim adjustable lighting, if necessary.
- ✓ Dust lamps and clean lens surfaces to enhance lighting performance.
- ✓ If any lighting operates from photocells & rechargeable batteries, clean photocell surface. Replace any failed rechargeable batteries.
- ✓ Conduct a night inspection to ensure security lights are in good operating condition.

PARKING LOTS AND PAVEMENT

- ✓ Pavements should be crack-filled and seal-coated every 5 to 7 years.
- ✓ Examine pavement to check for cracking and spider-web patterns. This represents need for sealcoating or patching.
- Check for holes or sunken areas. This represents failed pavement and requires removal and replacement of damaged base/caliche, and application of new asphalt.
- ✓ Inspect any curbs and gutters in the parking lot or along roadways. Patch and repair if damaged.
- ✓ Inspect all car stops or car barriers to determine if they are secure.
- ✓ Examine stripes and lines on paved surfaces to make sure they are clear and visible.
- Are all parking lot or roadway lights properly operating? Do all timers and photocells work properly to turn-on lights at dark and turn-off in daylight?
- ✓ Ensure ADA compliant handicap/wheelchair access exists from parking lots to church buildings.
- ✓ Check sidewalks for tripping hazards.