

Chelsea Housing Authority

PREVENTIVE MAINTENANCE POLICY

Adopted: April 14, 2010

Preventive maintenance is work undertaken according to a schedule to prevent breakdown of major mechanical systems and equipment, and to prevent the deterioration of apartments and equipment. The CHA Preventive Maintenance Program will include regular comprehensive inspections and repairs of all units, equipment, buildings, and common areas. Identifying these maintenance needs will help the authority reduce the frequency and severity of breakdowns and service interruptions. These inspections will include checking, measuring, observing, and correcting deficiencies found in the units, major mechanical systems, equipment/vehicles, exterior of units, and grounds.

The CHA Preventive Maintenance Program will be the key to achieving control of maintenance. It will reduce resident-generated work orders to a manageable level, speed up vacancy turnaround since units will be generally in better condition upon a vacate, and provide information to management for follow-up with regard to care of the unit by the occupant.

The Maintenance Department will have more control over the scheduling of preventive maintenance than it has over routine corrective or emergency maintenance. Repair needs caught early will prevent emergencies, save dollars later, and substantially reduce resident generated work-orders. The preventive maintenance inspections and work also will help establish a record of deterioration which may signal modernization needs that can be systematically planned and scheduled. This maintenance will avoid waiting for a major crisis to occur before addressing a predictable problem.

The CHA Preventive Maintenance Schedule will identify when tasks need to be completed. The system in place will record the date each inspection was conducted; who did it, and a process for ensuring that needed work is completed. This process will assign accountability to inspectors, and provides a sense of responsibility for their work.

When the preventive maintenance program requires work that is predictable and repetitive (such as cleaning burners or replacing filters), maintenance staff will tend to work from a schedule. If inspections identify a need for unanticipated repairs, or replacements, the staff will generate work orders. If work orders are written, they will be identified as routine or emergency and will follow the work assignment process. A schedule of unit inspections will be prepared at the beginning of each calendar year and monitored each month to ensure that all units are inspected at least annually.

1.0 PREVENTIVE MAINTENANCE PROGRAM

Preventive maintenance is part of the planned or scheduled maintenance program of the Housing Authority. The purpose of the scheduled maintenance program is to allow the Authority to anticipate maintenance requirements and make sure the Authority can address them in the most cost-effective manner. The preventive maintenance program focuses on the major systems that keep the properties operating. These systems include heating and air conditioning, electrical, life safety and plumbing.

A. General Operating Systems

The heart of any preventive maintenance program is a schedule that calls for the regular servicing of all systems. The development of this schedule begins with the identification of each system or item that must be checked and serviced, the date it must be serviced, and the individual responsible for the work. The servicing intervals and tasks for each system must be included in the schedule. The completion of all required tasks is considered a high priority for the Housing Authority.

The systems covered by the preventive maintenance program include but are not limited to:

1. HVAC SYSTEMS

- A. boilers
- B. circulators
- C. domestic hw tanks
- D. air conditioning units

2. SECURITY SYSTEMS

- A. exterior lighting
- B. public hallway lighting
- C. building doors and locks

3. FIRE AND LIFE SAFETY SYSTEMS

- A. emergency generators
- B. fire extinguishers
- C. emergency lighting
- D. exit lights
- E. sprinkler systems
- F. fire alarm systems

4. ROOFS

- A. roof inspection
- B. gutter cleaning

5. ELEVATORS

- A. elevator inspection

6. PLUMBING

- A. catch basins
- B. sanitary drains

7. VEHICLES

- A. safety inspection
- B. tune up
- C. fluid check

8. ELECTRICAL HEAT

- A. common area electric heaters

9. LARGE EXHAUST FANS

- A. roof top units

10. ANNUAL INSPECTIONS

- A. dwelling units
- B. site
- C. building systems
- D. common areas

11. MECHANICAL EQUIPMENT

- A. sump pumps

12. COMMON AREAS

- A. grounds
- B. hallways and stairwells
- C. community rooms and rest rooms

D. elevators

13. PLAYGROUNDS

A. Inspection

14. PEST CONTROL

A. extermination

2.0 PREVENTIVE MAINTENANCE PROCEDURE

A specific program will be developed for each system. This program shall include a list of the scheduled service maintenance for each system and the frequency and interval at which that service must be performed. The equipment and materials required to perform the service will be listed as well so that they will be on hand when needed. As assessment of the skills or licensing needed to perform the tasks will also be made to determine if an outside contractor must be used to perform the work. The preventive maintenance schedule must be updated each time a system is added, updated, or replaced.

1. HVAC Systems

The Housing Authority will have a program for maintenance of the mechanical systems to ensure that the proper amount of heat and hot water is readily available and maintained at the proper temperature and that all circulator pumps are serviced and air filters changed.

- A. Check all units including controls.
- B. Inspect unit and piping for leaks, holes, or loose connections.
- C. Natural Gas Units: inspect and clean burners if needed;
 - check pilot operation;
 - inspect flue and clean if needed;
 - check firebox for soot buildup
 - check temperature settings-hot water tanks should not be more than 130*
 - check pressure relief valve for proper operation and check that drain pipe length satisfies code requirements;
 - remove any combustible materials;
- D. Check circulator pumps for proper operation and leaks. Oil if required.
- E. Check A.C. units for proper operation: listen for short cycling
 - check for refrigerant and oil leaks
 - inspect wiring and controls
 - check for corrosion
 - replace air filters – bi annually

2. Security Systems

The Housing Authority will have a program for maintenance of security systems to ensure they will perform as needed to maintain a well-lit and secure environment.

- A. Check that all exterior and hallway lights are in place, undamaged and working; Replace bulbs as needed.
- B. Check operation of time clocks and or sensors;
- C. Check door closers to insure doors close and latch;
- D. Make sure doorknobs and panic bars are not loose;
- E. Inspect door frame and glass.

3. Life Safety Systems

The Housing Authority shall have a comprehensive program for maintenance of life safety systems to ensure that they will be fully functional in the case of an emergency. Implementation of a schedule that includes the inspection, servicing and testing of this equipment to be included in the plan includes the following:

- A. Exercise the emergency generator every week
 - Inspect generator battery for corrosion
 - Check generator for oil leaks
- B. Have all fire extinguishers inspected and certified annually
- C. Inspect all emergency lights annually
 - Test each light with test switch
 - Replace bulbs or batteries as needed
- D. Inspect all exit lights
 - Replace bulbs as needed
- E. Check sprinkler system for signs of corrosion and leaks
 - Have system inspected by a certified sprinkler engineering firm annually
- D. Inspect and test every smoke alarm, heat detector and carbon monoxide detector in every unit; hallway; common area; boiler room; basement and attic to insure that each device works and rings out to the fire alarm panel annually.
 - Inspect and test all fire alarm panels to insure that all signals will report to central fire alarm monitoring system annually.

The plan will include the required testing and servicing as required by manufacturer's recommendations. It will also include a determination of the most reliable and cost effective way to perform the work including the decision to hire a contractor.

4. Roof Repairs/ Replacement

Maintenance of roofs requires regular inspections by knowledgeable personnel to ensure that there is no unauthorized access to roof surfaces and that there is good drainage, clear gutters and prompt discovery of any deficiencies.

- A. Remove any trash and debris from roof.
- B. Inspect roof for damage and deterioration; punctures; missing shingles; loose flashing.
- C. Inspect gutters and downspouts for obstructions (clean as necessary).
- D. Inspect stack vents for obstruction and security covers.

The authority maintenance staff will usually undertake only minor roof repairs. Therefore there should be a list of approved roofing contractors to take on more serious problems for roofs no longer under warranty.

- 5. The Housing Authority will have a program that ensures that the elevators are inspected annually by The Commonwealth of Massachusetts Department of Public Safety – elevator inspection division. The elevators will be properly maintained by a reputable elevator service company.
 - A. Check elevator signal lights for proper operation
 - B. Inspect elevators for graffiti and damage – clean as needed.

- 6. The Housing Authority will have a program in which will ensure that the storm drains, catch basins and sanitary drain lines are maintained and remain flowing at all times.
 - A. Storm drains and catch basins should be inspected as needed.
 - B. Storm drains and catch basins should be cleaned annually.

7. Vehicle/Equipment Maintenance

The Housing Authority will protect the investment it has made in vehicles and other motorized equipment by putting in place a comprehensive maintenance program. The vehicles and equipment to be covered include:

- A. See Appendix A.

8. Electrical Heat

The Housing Authority will have a program that inspects all common area electric heaters to ensure that the public areas of all buildings are adequately heated and that all building systems in these areas are protected.

- A. Check electric heating units for proper operation, including any thermostats.
- B. Check that fan motors are operating properly if applicable.

9. Large Exhaust Fans

The Housing Authority will have a program that inspects all rooftop exhaust fans for operation. Motors will be checked and belts adjusted to ensure the longest life possible for all mechanical parts.

- A. Listen for unusual noises or vibrations
- B. Inspect belt condition and alignment; adjust tension as required.
- C. check motor and fan bearings.
- D. Inspect general condition of exterior and interior of unit.
- E. Check operation of controls.

10. Annual Inspections

The Housing Authority's goals of efficiency and cost-effectiveness are achieved through a carefully designed and rigorously implemented inspection program. This program calls for the inspection of all areas of the Authority's property including;

- A. Dwelling Units
- B. Site
- C. Common areas
- D. Building exterior
- E. Building Systems

Each area is to be inspected annually and documented with inspection forms and work orders as backup and will ensure that all areas comply with standards set by HUD and local codes.

11. Mechanical Equipment

Sump pumps are to be inspected and tested for proper operation to provide protection against flooding and subsequently damage to boilers; hot water tanks, basements and crawl spaces.

- A. Manually test all flotation devices to ensure proper function.
- B. Visually inspect each sump pump and it's associated wires and switches for wear and proper connections.

12. Common Areas

Regular inspections of the property grounds and building exteriors as well as building interiors are required to maintain the curb appeal and marketability of the property.

- A. Ground will be policed daily and any trash or debris will be disposed of from the site as well as around any and all dumpster enclosures.

- B. Grounds and buildings will be policed daily for any graffiti. Graffiti will be removed within twenty four hours whenever possible.
- C. Common hallways and stairs will be swept and mopped on a regular schedule. Each hallway should be done at least once per week.
- D. Community rooms, kitchens and rest rooms will be cleaned and vacuumed daily. All trash barrels will be emptied and any paper supplies will be restocked as needed.

13. Playgrounds

- A. Playgrounds will be policed daily for graffiti and trash and all shall be removed immediately.
- B. Check all apparatus daily for any damage.
- C. Tighten any and all nuts and bolts bi-annually.

14. Pest Control

The Housing Authority will make all efforts to provide a healthy and pest-free environment for its residents. The Authority will determine which, if any, pests infest its properties and will then provide the best possible treatment for the eradication of those pests. All residents will be informed at least forty eight hours before treatment. The notification will be in writing and will include instructions that describe how to prepare the unit for treatment. If necessary, the instructions shall be bi-lingual to properly notify the resident population. Resident requests for extermination will be done routinely at least once per week or as often as needed. Annual flush out of buildings will be completed on an as needed basis and determined by funding.

Appendix A

	year	make	model	body	vin#	registration
1	1993	Chevrolet	C1500	Pickup	1GCDC14Z6PE1866373	M46608
2	1995	Chevrolet	K3500	Utility	1GBHK34K1SE185941	M51590
3	1993	Kubota	Tractor	Tractor	50602	M47155
4	1996	Ford	Super	Dump	1FDLF47G2TEB77268	M55741
5	1999	Ford	Econoline	Van	1FTNE24L9XHC13855	M28027
6	1999	Ford	F250	Pickup	1FTNF21L1XEE64730	M48174
7	2002	Jeep	Grand	Cher	1J4GW48S72C174637	M66768
8	2002	MAD VAC			2806 OT	M70481
9	2005	Jeep	Grand	Cher	1J4GR48KX5C652884	M74164
10	2008	Sure	Utility	Trailer	5JWTU162X81015637	M80533
11	2009	Bobcat	S100	Skid - Steer	AB6420018	none
12	2009	Chevrolet	K2500HD	Pickup	1GCHK44KX9F168335	M80534
13	2009	Chevrolet	K2500HD	Pickup	1GBHK44K09F167960	M80532
14	2010	Chevrolet	EXPVAN	Van	1GCZGFBG4A1118743	M81100
15	2010	Carry	Utility	Trailer	4YMUL0819AV069406	M50185
16	2011	Ford	DRWSUP	Bucket Trk	1FDUF5GY3BEA91565	M66415
17						
18						
19						
20						
21						
22						
23	1998	Load	U1510-260	Trailer	4L2PXF11W2000094	Off Road
24	1997	Ford	Econoline	Van	1FTHE242OVHB53997	Off Road
25	1992	GMC	Vandura	Van	2GTEG25H8N4506892	Off Road
26						
27						
28						
27						

Appendix B

Scheduled Checklist

Daily	Weekly	Monthly	Bi-annual	Annual
Grounds	Generator Test	Ext. Lights	Emergency Lights	Unit Insp
Hallways	Hall Lights	Build. Drs/locks	Playground-bolts	Site Insp
Stairwells	Vehicles-fluids	Lg. Exhaust fans	Ac Units – Replace filters	Building Insp
Comm. Rooms		Sump Pumps	Gutter Cleaning	Comm. Area Insp
Pub. Restrooms				Boilers-service
Elevators				Circulators
Playgrounds				Hw Tanks
				Generator Service
				Fire Extinguishers
				Sprinkler System test/service
				Fire Alarms
				Annual Elevator test
				Catch Basins
				Sanitary Drains
				Vehicle Tune up-Sticker
				Roof Inspection