

SOMERVILLE HOUSING AUTHORITY
MAINTENANCE PLAN

APPLIANCES

The following appliances are used at various developments:

- Gas ranges
- Electric ranges
- Refrigerators
- Electric range tops (h'cap units)
- Electric wall ovens (h'cap units)
- Hot water heaters

Each elderly development with storage space available should have two stoves and two refrigerators on stock as spares at all times. If storage space is not available on site, try to arrange to keep at least one spare per development at a development in the cluster, which has space.

When an appliance has been condemned:

- Complete appliance disposal form (send to Procurement Office).
- Remove condemned appliance and replace with spare (development maintenance mechanic does this).
- Complete appliance tracking form for appliance supplied to unit and submit to Procurement Officer.
- Complete new appliance requisition form to obtain a replacement spare appliance.

Generally the maintenance person has responsibility for "condemning" appliances. From time to time, managers may have reasons to do this on their own.

Hot Water Heaters

Since some developments with individual hot water heaters have no storage space, these must be requisitioned from Procurement Officer as needed.

Managers have authority to requisition all needed appliances from Procurement Officer.

FORMS:

APPLIANCE REQUISITION & DISPOSAL APPLIANCE TRACKING FORM

EQUIPMENT

Procurement Office is responsible for two kinds of equipment.

Office Equipment

- Typewriter
- Copy machine
- Computers
- Fax machines

Maintenance Equipment (as needed)

Snowblowers

Lawnmowers

Leafblowers

Weedwhackers

Buffing/stripping machines

Wet vacs

Vacuums

Carpet cleaning machines

The Maintenance Department is responsible for the safe keeping and maintenance of all equipment. Maintenance Mechanics will be evaluated on their care of equipment including safe and appropriate storage and cleanliness. Annual Service must be obtained on snowblowers and lawnmowers by Procurement Department.

The Procurement Department must arrange for annual service by issuing a purchase requisition and arranging for pick up and delivery from a small equipment and repair company.

For computer maintenance, contact the Procurement Department. For service on copying machines, contact the Procurement Department. Smaller equipment, such as weed whackers and leaf blowers may have to be replaced more often than other equipment. Just issue a requisition.

When new equipment is received, be sure to keep all information so that any repairs required during the warranty period are obtained from the original vendor.

Large equipment purchases (over \$300) require a Fixed Asset Requisition. Be sure to keep organized and complete files on all development equipment.

MAINTENANCE

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MAINTENANCE

Introduction: Responsibilities

There are three essential elements to development maintenance.

- Custodial
- Preventive Maintenance and Service
- Repairs

All of these are critical to the health, safety, security, and sense of general well-being to our residents. Maintenance Supervisor needs to be aware of the status of each set of work outstanding and completed and be able to communicate priorities and outstanding needs clearly to everyone involved in the maintenance process.

Maintenance Supervisor is responsible for:

Maintaining maintenance stock onsite:

- All necessary paint
- Outlet covers
- Switch plates
- Bathroom fixtures
- Toilet seats
- Replacement range top elements (electric ranges)
- Hallway and light bulbs
- All custodial supplies
- Two spare refrigerators and stoves where storage space exists
- Electric baseboard replacement units and thermostats
- Glass and screens
- Apartment doors
- Other commonly used items

Regular service on small equipment
Annual service of fire extinguishers
Obtaining quotes on all work to be contracted
Weekly common area inspections

Supervision of custodial work.
Coordination of major maintenance projects
Coordination of extermination
Vacancy inspections

Insuring appropriate snow removal
Other work as required

CUSTODIAL

Custodial work is directly under the supervision of Maintenance Supervisor, and Maintenance Mechanics will be held accountable for maintaining the highest possible standards of cleanliness.

Custodial tasks are generally carried out by the Maintenance Mechanic or Groundskeeper. Their work may be supplemented by other staff members, who may be assigned in addition to Maintenance Mechanic or in cases of vacancies or absence, and by contractors.

General Description of Tasks

- Picking up trash, mowing, weeding and landscaping.
- Cleaning all common area floors, walls, windows & ceilings, including stripping, waxing buffing floors, cleaning elevators, and vacuuming rugs.
- Changing light bulbs.
- Cleaning common bathrooms.
- Disposing of trash and maintenance of trash rooms.
- Cleaning out vacancies following move-outs and housecleaning prior to move-ins.
- Removing snow from sidewalks, paths, steps, and parking areas.
- Responding to emergency situations including lockouts, fires, flooding, or other emergency.
- Regularly inspecting buildings and grounds to check for conditions requiring correction repair.
- Regularly checking boiler rooms to detect problems

Standards for Cleanliness

All SHA buildings must be maintained to the highest possible standards of cleanliness. Special attention should be paid to areas which may contribute to roach infestation (such as trash compactor rooms and chutes and vacancies in which food may have been left.)

Attention to detail is critical to maintaining the highest standards. Edges of floors, areas behind doors, spot cleaning walls and glass, all make the difference between a clean building and a grimy one.

Maintenance Supervisor is responsible for setting up daily, weekly and monthly cleaning routines to insure that the highest standards can be maintained. Maintenance Supervisor and Managers need to walk through buildings completely at least weekly to insure that standards are being met and to set new priorities as needed. An example of daily, weekly, and monthly cleaning routines follows:

Building daily checklist

(High-rise buildings / 2 elevators /grounds)

Daily routines

- Check grounds for litter
- Empty trash in offices
- Run compactor and remove trash to dumpster two times a day
- Clean and deodorize trash rooms
- Clean bathrooms
- Clean elevator floors and wipe surfaces
- Check community room for litter; empty trash; sweep and wash floors
- Wipe down laundry room and machines; empty trash; and sweep and wash floor
- Sweep and wash lobby area floors; wipe doors and surfaces as required.
- Check whole building at end of each day to close windows and check for problems.
- Walk through all hallways and stairwells to check for litter and spills and clean as needed.

Weekly Tasks

- Check lights and replaces bulbs as needed.
- Buff lobby, community room and lobby room floors
- Sweep, wash, and buff all hallway floors
- Spot clean all hallway walls.
- Wash windows in lobby.
- Summer: cut grass; Fall: rake Replace ceiling tiles as needed Clean offices

Monthly tasks

- Clean all hallway windows
- Wipe all railings on all floors
- Sweep down and wash as needed all stairwells
- Thoroughly clean compactor room
- Remove and clean all light globes as needed
- Thoroughly clean common kitchen

As-Needed Tasks

- Vacancy cleanout - housekeeping
- Snow removal

Other Standards

In addition to maintaining the highest possible cleaning standards, custodians are responsible for:

- Maintaining adequate stock in an orderly manner in an appropriate storage area at all times.
- Not allowing furniture and other disposed of items to accumulate in stock and storage areas
- Notifying the Maintenance Supervisor of needed repairs and/or urgent and emergency conditions when they arise.
- Responding to emergencies at night and weekends.

Contracting for Certain Custodial Work

In certain developments, it may be necessary to supplement the work of Maintenance Mechanic by contracting out portions of the work. Procurement Office is responsible for writing specifications and obtaining quotes for this work. This work will vary depending on the features and size of each development.

- Bi-weekly mowing and weeding from April 15 - September 15.
- Annual or bi-annual floor stripping
- Annual carpet cleaning
- Outside window washing and inside window washing for 2-story windows.

Some or all of these contracts will be required in all developments in which the Maintenance Mechanic has more than 75 or so units, or where a Maintenance Mechanic is covering more than one development.

PREVENTIVE MAINTENANCE AND SERVICE:

Equipment and Building Systems

A critical component to all maintenance delivery systems is preventive maintenance and regular service. Preventive maintenance runs the gamut from visual inspections, such as Maintenance Mechanic's daily rounds and Managers' weekly rounds, to the annual breakdown, service and re-assembly of boiler completed by a qualified member of the Maintenance Staff.

Preventive Maintenance for Equipment and Building Systems

The following building systems require preventive and/or regular service:

- Fire Protection Systems including alarm systems, extinguishers, magnetic door closers, sprinkler pumps and the fire jockey pumps.
- Heating, Ventilation and air condition including pumps, motors, fans, boilers, burners, temperature controls systems, and other components.

- Electrical systems including transformers, main breakers, generators and transfer switches.
- Intercoms and emergency pull systems.
- Elevators, including all control and hoistway systems.
- Domestic hot water systems, including pumps, tanks, and controls.

<u>System Component</u>	<u>Responsible</u>
Elevators	South Shore Elevator
Intercoms/Emergency Pulls	Maintenance Department
Hot water (separate systems from heat) Electrical Systems	Maintenance Department
Generators	Power Products
Fire Extinguishers	Procurement Department
Fire Alarms	B & T Alarm Company
Door Alarms	Maintenance Department
Ventilation Equipment	Procurement/Maintenance Department
Heating System	Maintenance/Procurement Department

Call

Anthony Crespo @ 625-1152

Mike Flaherty @ 625-4522, Cell (617) 293-0398

Heating Systems may have in-house or contractual services. In all cases contact the Maintenance Supervisor with problems or questions.

SERVICE CONTRACTS

Extermination

Combination of in-house and private contractor.

Trash Chute Cleaning

The Procurement Department will provide all buildings with trash chutes with quotes to have them cleaned on an annual basis. Names of companies that perform this service will be obtained from the Procurement Department.

Routine Maintenance And Repairs

At this time, most routine maintenance repairs are handled by the Maintenance Department. Some types of repairs must be handled by contractors including fence repair, major drain line cleanouts, roof work, specialty items such as roof hatches, specialty lock repairs, and so on. The Procurement Department is responsible for obtaining quotes, with the assistance of the Maintenance Supervisor, for contracted work repairs.

Priorities for Maintenance Work

The following list of priority workorders has been prepared to provide a guide to both managers and the maintenance staff. Circumstances at the development may push other items into more urgent categories, and this list should be treated as a guide in that event.

The Maintenance Supervisor is responsible for insuring that work in these categories is carried out as quickly as possible; in the event that contractors are required, the Procurement Department will obtain quotes with the assistance of the Maintenance Supervisor. In the event that it can be handled by the in-house crew, the Maintenance Supervisor is responsible for notifying the crew as quickly as possible. Any time that a Maintenance Supervisor is unable to have the item repaired within a reasonable time frame, the Supervisor is responsible for notifying the Director of Operations.

Be certain to follow the emergency notification procedures attached.

Priorities

Crisis Response: Fire - Flood - No Heat - No Hot Water - No Electricity

Manager's role may include:

- Emergency relocation of tenants (fire, flood)
- Sending out regular information flyers
- Obtaining food/coffee in community room
- Other services to residents

Emergency Responses

- To be handled as quickly as possible

- May require flyers to residents, extra security measures, other actions on part of management
- Contractors to be called if the emergency cannot be handled in-house

Immediate Response 24-Hour Response

Front door security breach
 Smoke detectors
 Intercoms
 Back ups/stoppages
 Generators
 No hot water
 Fire protection
 Leaks
 One elevator down
 Broken windows
 Graffiti removal
 Apartment door security
 Major tripping hazards
 Elevator failure (all elevators)

48-Hour Response

Rodents
 Appliance repair/replace

Urgent [one/two-day response period]

Contractors to be called if needed
 Graffiti removal
 Fence and wall repair
 Hand rail repair
 Step repair
 Tripping hazards
 Ceiling tiles
 Roaches
 Vacancies

Maintenance Crew Repair Work

The first step in each repair request is to call for a workorder. Tenants should continue to call 625-4522 or managers and Maintenance Mechanic should call 625-4522 for workorders. Apartment Inspection work requests should be sent to the Maintenance Office at 30 Memorial Road.

Apartment Inspection Process

All emergency items will be repaired or abated immediately if possible. Otherwise emergency items will be repaired or abated within 24 hours.

A schedule for apartment inspections by development is attached. All routine items will be sorted by classification by the Maintenance Supervisor and assigned to the appropriate tradesman for repair. This schedule indicates that apartment inspections for the assigned development need to be completed by Thursday of each week so that workorders are ready by Friday, and the Maintenance Supervisor can assign a crew of workers to that development on Monday of the following week. This system aids in streamlining the work to be done. Please get permission to enter when possible to insure swift completion of scheduled work.

When completing an inspection, it is important to check all possible work needed. Do not simply ask a tenant what is wrong (although this can sometimes turn up problems which are not easily seen) but check each apartment component yourself, including turning the radiators off and on, and running water in both sinks. Test the smoke detector. Following the inspection, immediately write up workorders and submit to the Maintenance Office for input. Apartment Inspection Form attached.

Tenant Requested Work

Tenants will continue to call 625-4522 to report problems in their unit requiring maintenance staff assistance.

Manager and Maintenance Mechanic requests

The Administrative Assistant/Maintenance Operations and Managers need to inspect each building weekly and Maintenance Mechanic daily. Based on these inspections, workorders should be called in to the Elderly Maintenance office. Be sure to check that there is not already a workorder in place for the item before calling in a new workorder.

Vacancy Procedures

- Move-out: Maintenance Mechanic cleans out. IMMEDIATE disposal of all food.
- Manager Vacancy Inspection - workorders to Maintenance Department.
- Maintenance Crew: Does its work as part of routine maintenance.
- Move-in Date Set: Manager -notifies Maintenance Supervisor of planned move in date (by memo preferred).
- Maintenance will notify Manager of expected completion date.

Immediately upon a move-out, the apartment will be cleaned out by the Maintenance Mechanic. If the clean-out has to wait a few days, the Maintenance Mechanic is required to clean out all items of food immediately. Following the clean-out, the manager must inspect the unit and submit workorders to the Maintenance Office for input using the apartment inspection form (attached). These workorders will be assigned to the specific Maintenance Staff. See Vacancy Procedure Policy (attached).

Maintenance Supervisor will schedule the apartment for painting and all other work.

As soon as the apartment is completed, or while the apartment is being cleaned after all repairs are made, the Manager will reinspect and make sure that all necessary workorders are completed on the outstanding workorder list.

As soon as the Manager has a move-in date established, the Manager must notify Maintenance of the move-in date and any remaining outstanding work required. The Maintenance Department must complete the workorders before the move-in date as notified by the manager. The only exception to this is in the case of emergency move-ins, when the Maintenance Department will be required to complete the work immediately.

Occupied Apartment Painting Policy

The Maintenance Department does not currently have the resources to paint occupied apartments. However, in the event that there has been leaking or flooding or plastering work done, the crew staff will repaint those areas of the apartment. Judgments for this can be made at the time of the apartment inspection process. Managers may provide paint upon request to any resident.

Contracted-Out Repair Work

The following types of repairs may need to be contracted out:

- Fence repair/replacement
- Some ventilation equipment repairs
- Roofing/gutters/downspouts
- Common Area painting
- Common Area carpeting
- Chimney cleaning
- Tree removal
- Systems repair
- Major cleaning work
- Clearing and rodding drains
- Other work which exceeds available in-house resources

Procurement Department is responsible for writing scopes of work and obtaining quotes for all contracted work.

FORMS:

APARTMENT INSPECTION FORM
BUILDING GROUNDS INSPECTION FORM
APARTMENT INSPECTION SCHEDULE

EMERGENCY NOTIFICATION
SHA HOUSING PROGRAM/APARTMENT INSPECTION FORM

SNOW AND ICE STORM PLAN

All Developments

For all buildings, it is the Maintenance Supervisor's responsibility to insure that all pathways, stairs, and sidewalks are cleared appropriately, to hire additional shovelers if required, and to insure that the Maintenance Mechanic for each building have adequate supplies and snowblowers in good repair. Supplies should include rock salt and shovels. Extra shovels must be on hand in the event that additional shovelers need to be hired.

Priority Order of Shoveling/Plowing

Maintenance Mechanics shall follow the following general order of shoveling to insure the safety of residents:

Single Entrance Buildings (Mid-rise/High Rise)

1. Fire Hydrants
2. Front entrance to street
3. Sidewalks
4. Emergency Entrance to nearest cleared pathway
5. Path to dumpster
6. Sewer Drains

Multiple Entrance Buildings (garden style)

1. Fire Hydrants
2. Front steps/path to street
3. Sidewalks
4. Rear entrance to nearest shoveled pathway or drive
5. Dumpster/Barrels
6. All other pathways
7. Sewer Drains

Following shoveling, Maintenance Mechanics shall spread adequate salt to insure melting of any remaining ice or snow, if required by low temperatures.

In the event of blocked gutters or other cause of icing/icicles, the Maintenance Mechanic shall remove icicles as they form to prevent injury to residents.

Overtime/Call in

Maintenance Supervisor is responsible for insuring that shoveling begins as early as possible and practical during a snowstorm. During an extended storm period, Maintenance Mechanic will need to make repeated passes at priority snow removal areas to insure the safety of residents prior to removing snow from second priority areas.

FORMS: SNOW SHOVELERS TIME SHEET
LIST OF CONTRACTORS

SNOW SHOVELERS TIME SHEET

A Snow Removal Time Sheet must be completed by every Temporary Snow Shoveler.

Shovelers will be paid as a vendor. Finance cannot reimburse individuals unless they have a Social Security number. If possible, please attach a copy of the card to the first Time Sheet submitted.

Please be sure that the shoveler and the Maintenance Supervisor have both signed the Time Sheet. It will not be processed unless both signatures are present.

SUPPLIES AND STOCK

Supplies and stock for the development may be obtained in four ways:

1. Procurement Department
2. Purchase Order
3. Open Purchase order
4. Petty Cash

Purchase Order

For special order items, such as glass, screens, doors, pumps, motors, and other items, obtain quotes and order through purchase order. The Maintenance Supervisor, Director of Operations, or the Executive Director signs off on all purchase orders depending on amount.

- Items under \$300 Maintenance Supervisor
- Items over \$300 Maintenance Supervisor and Director of Operations
- Items over \$1,000 Maintenance Supervisor, Director of Operations and Executive Director

Petty Cash

Small expenditures will be reimbursed through petty cash. See Petty Cash section.

INTRODUCTION

This manual contains the policies and procedures for preventive maintenance for the Somerville Housing Authority, as they apply to each individual building. Each of the sections provide information on the exact procedures, record keeping, activity cycles, and locus of responsibility for each building system or component covered by this policy.

1. Defining the Terms

Preventive maintenance is the term used to describe maintenance activities which, when performed consistently and correctly, help to prevent breakdowns and extend the life of building features, equipment and systems. These activities can be categorized as:

Inspection

Testing

Cleaning

Service

Repair

Replacement

Inspection

Inspection is an integral part of any preventive maintenance program. Inspection includes casual observation in the course of the day by SHA staff and residents through which deficiencies can be reported and corrected as well as formal inspections on a regular basis of all building components and systems. Most of the inspections called for in this manual will be performed by non-technical SHA staff (managers and resident custodians), which others will be performed by trained technical staff such as electricians, fire extinguisher contractors, and others. Inspections pick up obvious problems on a regular basis and report them for correction before they become larger problems.

Cleaning

While cleaning may not be considered a part of preventive maintenance, it is critical to the operation of many systems, and to the longevity of building surfaces. It includes regular cleaning of elevator tracks to prevent the build up of debris, regular cleaning of carpets to prevent deterioration from dirt particles, regular cleaning, stripping and

waxing of VCT flooring to lengthen the life of such surfaces, and regular wipe downs of all equipment after every use.

Testing

In general, testing is performed as a method to determine whether or not an item is working, correctly. The most significant testing is performed by the fire alarm contractor who tests every "device" (smoke detectors, pull stations, sprinkler heads, etc) every year. Other testing includes checking testing boilers prior to the start of the heating system, and so forth.

FIRE ALARM SYSTEM INSPECTION AND SERVICE PROCEDURE

OBJECTIVE: To insure that the fire alarm system is operating properly and is maintained in accordance with applicable ordinances and codes.

POLICIES AND PROCEDURES:

Weekly/Daily Building Mechanic Responsibilities:

(1) The Development Mechanic shall check the master alarm panel regularly to determine that there is no trouble at the board, as indicated by a trouble light. The resident custodian shall note any problems with the board or any fire alarm devices (i.e. smoke detectors and pull stations) and report them to the Maintenance Supervisor if any are noted.

As Needed/Weekly Maintenance Mechanic Responsibilities

(1) The Maintenance Mechanic shall report any problems with the fire alarm system immediately upon being informed of the problem to the Maintenance Supervisor. The Maintenance Mechanic shall also check all pull stations and the alarm panel during the regular weekly walk-through inspection.

Quarterly

(2) The Maintenance Supervisor shall coordinate all fire testing procedures through appropriate notification to residents by assisting the contractor by having the development mechanic available during testing to open apartment doors as needed.

(3) The Maintenance Mechanic shall report all resets to the Maintenance Supervisor immediately following each occurrence.

As Needed

(4) The Maintenance Mechanic shall maintain copies of all reports from the Fire Alarm Testing, Contractor in the Preventive Maintenance Service loose-leaf notebook and shall send the original to the Building Maintenance Manager immediately upon its receipt.

Maintenance Supervisor Responsibilities:

(1) The Maintenance Supervisor shall be responsible for bidding a service contract once every two years, or at such annual intervals as may be determined to be necessary. The Maintenance Supervisor shall be responsible for maintaining central records of all service and testing, and for payment of all invoices. The Maintenance Supervisor shall be responsible for insuring that all maintenance over and above regular testing is necessary and for approving all expenditures of this type.

Contractor Responsibilities:

- As-Needed (1) The contractor shall be responsible for re-setting the alarm system after every fire alarm. The contractor shall be notified by the Fire Department of each occurrence. Managers and maintenance personnel have authority to call the contractor in the event that the contractor does not report to reset the alarm after an alarm call.
- Quarterly (2) The contractor is responsible for quarterly testing of the alarm system. At each quarterly visit, at least 1/4 of all alarm devices, including apartment smoke detectors, shall be tested, so that every device is tested at least once each year. The contractor shall be responsible for coordinating all testing with the building Maintenance Department
- Quarterly/As needed (3) The contractor is responsible for completing the Quarterly Inspection Reports and submitting copies to the manager and to the Fire Department. The contractor is responsible for leaving service slips upon completion of any alarm reset or service visit with the Building Mechanic who will bring them to Roy George.
- RECORD KEEPING (1) Records of all service visits, including- regular testing, alarm resets, and repair calls shall be maintained by Roy George, along with invoices.
- (2) Copies of the records of all service visits shall be maintained by the Roy George in the Preventive Maintenance service looseleaf notebook in chronological order under fire alarm system

**FIRE ALARM SYSTEM SPECIFICATION SHEET
AND CONTRACTOR INFORMATION**

Building:

Control Panel Type:

Location of Control Panel:

Number of Zones:

Annunciator Panel Type:

Location of Annunciator Panel:

Hallway Annunciator Panels? Yes
or No/Number

Where are hallway panels located?

FIRE EXTINGUISHER INSPECTION AND SERVICE PROCEDURES

OBJECTIVE: To insure that all required fire extinguishers are in place and serviced on a regular basis in accordance with applicable ordinances and codes.

POLICIES AND PROCEDURES:

- Daily** Maintenance Mechanic Responsibilities:
(1) The Maintenance Mechanic shall report any missing- fire extinguishers as soon as it is noticed to the manager.
- Weekly** Manager Responsibilities
(1) The manager shall inspect fire extinguishers during each weekly walk though and note/correct any problems.
- Annually** (2) The Procurement Department shall issue a purchase order on an annual basis to have all fire extinguishers inspected/serviced by an appropriate contractor. The manager shall insure that all such inspections include appropriate tagging of all extinguishers indicating the date of the inspection.
- Every five years:** (3) Every five years, the Procurement Department shall issue a purchase order to have all fire extinguishers replaced.

RECORDKEEPING All fire extinguishers shall be tagged by the contractor including the date inspected.

The Manager and Maintenance Department shall maintain a record of all service visits and replacements of fire extinguishers in the Preventive Maintenance Service Record Loose Leaf under the Fire Extinguisher section.

The Manager and Maintenance Department shall maintain a record of all fire extinguishers, their type, location within the building, and purchase date in this manual (see subsequent pages in this section).

FIRE EXTINGUISHER CONTRACTOR PO RECORD

Building:

PO number and issue date:

Contractor Name:

Address

Phone

Contact Person

PO number and issue date:

Contractor Name:

Address

Phone

Contact Person

SPRINKLER SYSTEM INSPECTION AND SERVICE PROCEDURE

OBJECTIVE: To insure the continuous, effective and efficient operation of the sprinkler system.

POLICIES AND PROCEDURES:

Daily Building Maintenance Mechanic Responsibilities:
(1) The Building Maintenance Mechanic shall report any missing or damaged sprinkler heads as it is noticed to the manager.

Daily/As Needed Maintenance Mechanic Responsibilities
(1) The Maintenance Mechanic is responsible for reporting any damage to or suspected malfunctioning of the sprinkler system or pumps to the Maintenance Department as soon as a problem is detected.

Annually (2) The Building Mechanic is responsible for coordinating all sprinkler flow and pump testing with the Maintenance Department and the contractor on an annual basis.

Annually Procurement Department Responsibilities
(1) The procurement department shall be responsible for obtaining quotes/bids on an annual basis and issuing a contract or purchase order for annual testing of the sprinkler system by an independent licensed sprinkler systems company. This testing shall include flow testing to insure that the fire alarms go off if the sprinkler system is activated and PUM testing for fire pump and/or jockey pump. The Maintenance Supervisors shall be responsible for insuring adequate oversight of the contract, issuing work orders or PO for follow up repair work, and paying bills.

RECORD KEEPING Copies of all service slips associated with annual testing shall be maintained in the Preventive Maintenance Service Loose-leaf at each site and the originals shall be maintained by Roy George.

SPRINKLER SYSTEM SPECIFICATION AND CONTRACTOR SHEET

Building:

Date system installed:

Dry type heads located (note areas of building)

Wet type sprinkler heads located

(note areas of building and apartments):

Fire Pump Data:

Fire Pump Location:

Comments:

Contractor Information

PO number and issue date:

Contractor Name:

Address

Phone

Contact Person

PO number and issue date:

Contractor Name:

Address

Phone

Contact Person

BATTERY OPERATED SMOKE DETECTORS SERVICE POLICY

OBJECTIVE: To insure that all battery operated smoke detectors are operational at all times.

POLICIES AND PROCEDURES:

Daily Maintenance Mechanic Responsibilities:
(1) The assigned Maintenance Mechanic shall note all missing or damaged battery operated smoke detectors during the course of day to day work and report any problems immediately to the Maintenance Supervisor. In the event that a battery needs replacing (as indicated by a "beep" from the unit) the Maintenance Mechanic shall immediately replace the battery.

Annually (2) Once every year the Maintenance Mechanic shall replace all batteries in all battery operated smoke detectors as a preventive maintenance measure.

As needed/Daily Maintenance Supervisor Responsibilities
(1) The Maintenance Supervisor is responsible for issuing a work order and instructing the mechanic to replace all defective or missing battery smoke detectors immediately upon learning of the problems.

Monthly (2) The Maintenance Mechanic is responsible for testing all battery operated smoke detectors on each monthly building and grounds inspection by using a broom handle to activate the test button. The Maintenance Supervisor may delegate this responsibility to the Maintenance Mechanic, but shall be responsible for insuring that this is completed fully every month.

Monthly (3) The Maintenance Mechanic is responsible for keeping on hand adequate numbers of 9-volt batteries for the purposes noted above.

RECORD KEEPING The Maintenance Mechanic shall report all defective battery operated smoke detectors on the Building and Grounds Inspection, and shall maintain records of all work orders issued to correct deficiencies as part of the work order system.

Annually, the Maintenance Mechanic shall report on the attached checklist all batteries replaced during the annual replacement, and shall sign the checklist. This checklist shall be maintained in the Preventive Maintenance Service Loose- Leaf notebook.

STAND-BY GENERATOR INSPECTION AND SERVICE PROCEDURE

OBJECTIVE: To ensure a continuous, efficient and reliable source of stand-by electrical energy through regular maintenance and service of the Emergency Generator.

POLICIES

PROCEDURES: Maintenance Mechanic Responsibility

Weekly (1) The Maintenance Mechanic is responsible for a weekly inspection of the emergency generator and performing the tasks detailed on the Emergency Generator Weekly Service Activity Report (attached). The assigned Mechanic shall complete the report sign it and give it to the Maintenance Supervisor each week upon completion.

Procurement Department Responsibility

Annually (1) The Procurement Officer is responsible for obtaining quotes and issuing a purchase order on an annual basis to a qualified contractor for quarterly and annual service to the emergency generator and for insuring that the contractor completes all required activities on time. The Procurement Officer is responsible for maintaining all records of inspections and service performed by the assigned Maintenance Mechanic and the contractor.

Annually (2) The Procurement Officer is responsible for obtaining quotes and issuing a purchase order on an annual basis to a qualified contractor for annual service and testing of the Automatic Transfer Switch.

As Needed (3) The Procurement Office shall contact the Maintenance Supervisor in the event that the service contractor indicates a need for battery replacement or for any repair which is quoted at \$300 or more. The Maintenance Supervisor shall advise the Procurement Officer on how to proceed and/or shall arrange for alternate service as needed.

Service Contractor Responsibility

Quarterly (1) The service contractor shall be responsible for performing quarterly inspections and service as detailed on the attached Emergency Generator Inspection and Service Report.

Annually (2) At one quarterly service visit each year, the contractor shall complete all of the annually required tasks as indicated on the Emergency Generator Inspection and Service Report.

Maintenance Supervisor Responsibilities

As Needed The Maintenance Supervisor shall be responsible for reviewing repair or replacement decisions in consultation with the Director of

Operations and assisting the Procurement Officer in determining actions to be taken.

REPORTING: (1) "Emergency Generator Weekly Service Activity Report" is to be completed by the assigned Maintenance Mechanic/Groundskeeper and submitted to the Maintenance Supervisor. All copies shall be maintained in the annual "Preventive Maintenance Service Record" loose-leaf binder.

2) The "Emergency Generator Inspection and Service Report" is completed by the contractor at the time of each inspection and is submitted to the Maintenance Supervisor upon completion of the servicing. If the contractor chooses to provide and utilize its own report form, the Maintenance Department must determine that the inspection and servicing satisfies the criteria set forth on the SHA report form. These reports shall be signed by the contractors service representative and maintained in the loose-leaf binder as noted above.

**EMERGENCY GENERATOR SPECIFICATION SHEET
AND CONTRACTOR INFORMATION**

Building:

Location of Equipment:

Installation Date:

Warranty? Yes or no

Manufacturer:

KW:

Type of Fuel:

Transfer Switch Data:

Location of Transfer Switch:

Timer Self Test? Yes or No

Time of Self-Test each week:

If no self-test, when is generator to be operated each week?

What items run off the generator when the electricity is out?

Contractor Information/Generator

PO issue date and Number:

Contractor Name:

Address

Phone

Contact Person

Contractor Information/Auto Transfer Switch

PO issue date and Number:

Contractor Name:

Address

Phone

Contact Person

EMERGENCY GENERATOR WEEKLY SERVICE ACTIVITY REPORT

Performed by Assigned Maintenance Mechanic

LOCATION: _____ Day: _____ Time: _____

ACTIVITY	CHECK
1. Turn off controls to off position	
2. Check to insure there is enough fuel in the fuel tank (at least 1/2 full)	
3. Check lube oil level and record. Should be in safe zone or above - add oil mark on dipstick	
4. Check coolant level and record. Coolant should be visible in top radiator tank and on certain units levels should cover radiator inlet.	
5. Check generator area to insure there are no obstructions which could interrupt flow of cooling air. Be sure area is clear.	
6. Touch engine cylinder block (should be warm) to insure jacket water heater is functioning. (DO NOT TOUCH JACKET WATER HEATER!!)	
7. Check fluid level in battery/battery connections. Fluid should be visible.	
8. Check for specific gravity of battery, if possible.	
9. Check for oil, fuel, coolant leaks.	
10. Check for broken and loose wires.	
11. Check exhaust system-system must be clear and rain cap must be free. Check for rust.	
12. Press test lamp button to insure all test lamps are operational.	
13. Exercise unit for 1/2 hour with an attendant present (whether or not on automatic timer)	
14. Log all readings.	
15. Secure unit.	
16. Review automatic transfer switches.	

17. Return unit to automatic operations.

READINGS:

Voltmeter: _____

Ammeter: _____

Frequency: _____

Oil Pressure: _____

Water Temp: _____

Hour Meter: _____

Comments: _____

Serviced By (Assigned Maintenance Mechanic): _____

EMERGENCY GENERATOR INSPECTION & SERVICE REPORT

To be Performed Quarterly by Service Contractor

LOCATION: _____ Day: _____ Time: _____

- | ACTIVITY | CHECK |
|---|-------|
| 1. Service/clean air filter(s) as required. | |
| 2. Perform air inlet restriction test. | |
| 3. Check coolant level, condition of coolant, protection rating and perform pressure test. | |
| 4. Inspect/adjust hoses, belts, and linkages. | |
| 5. Diesel engines: Inspect injection system and fuel lines. | |
| 6. Gas/LP engines: Inspect complete ignition system, check timing, replace points, condenser and spark plugs. | |
| 7. Check engine heater operation. | |
| 8. Inspect fuel system including piping, solenoid valve and transfer pump where applicable. | |
| 9. Inspect exhaust system and drain condensation if system has drain provision. | |
| 10. Check battery charger operation and charge rate. | |
| 11. Check battery electrolyte levels and specific gravity, clean terminals as needed, spray terminals with corrosion protection. | |
| 12. Check all engine and generator shutdown and alarm systems. | |
| 13. Adjust output voltage and frequency as required. | |
| 14. Confirm proper operation of engine instrumentation. | |
| 15. After notifying SHA's representative and receiving authorization, operate transfer switch(es) and confirm proper operation of all timers and accessories. | |
| 16. Inspect transfer switch main contacts. | |
| 17. Instruct SHA personnel on the operation and routine inspection of the equipment. | |
| 18. Replace lube oil annually. | |
| 19. Replace lube oil filter(s) annually. | |
| 20. Replace fuel filter(s) annually. | |
| 21. Replace coolant filter(s) annually | |
| 22. Operate unit under available connected load for duration required to evaluate operation of system, with approval of SHA's representative annually. | |
| 23. Prepare report of each service visit to be signed by SHA's representative with a copy in the maintenance logbook to be left with the unit. | |

Serviced by:
Company:

Date:

Comments:

HEATING PLANT MAINTENANCE

Introduction

Maintenance of heating plants is among the most important maintenance performed within the Somerville Housing Maintenance Department. Heating plants require consistent and regular maintenance to serve out their useful life and provide the very basic service of heat and hot water to residents of the SHA developments. Significant capital upgrades and replacements of heating plants throughout the System have been completed over the last five (5) years, and a number of other projects are in the design or planning, stages. It is crucial that we protect this investment.

Very important roles are played by Managers, Maintenance Mechanics, Maintenance Supervisor, and the assigned Plumber.

It is the primary responsibility of the assigned Plumber to perform daily monitoring and maintenance functions and the primary responsibility of the assigned Plumber to perform more complex maintenance tasks, inspect the work of the Mechanics and make recommendations for replacement and repair of various systems and components. The Maintenance Supervisor will be responsible for monitoring and managing work performed by outside contractors. The Maintenance Supervisor will retain overall responsibility for overseeing heating plant work.

Although preventive maintenance is not performed on electric heating systems (except as part of apartment and buildings and grounds inspections) we have included a short section on the maintenance of stock for electrically heated developments due to the extreme importance of having stock on hand for heating repairs in the event of an emergency.

It is extremely important that the material in this section be accurately completed and that the procedures and policies called for are strictly adhered to.

ELECTRICALLY HEATED DEVELOPMENTS

OBJECTIVE: To insure that parts and supplies are on hand to repair electric heating in the event of failure.

POLICIES AND PROCEDURES:

- Annually** Assigned Electrician Responsibilities:
(1) During the course of Living Unit Inspections, check all thermostats and heating units to insure that they are working properly. It will not be possible to check heating units for operation on hot days; however, this procedure should be followed on any day that the temperature allows. Heating units with broken or missing covers can create a fire hazard and should be replaced or repaired immediately.
- Monthly/as needed** (2) The Maintenance Mechanic and Procurement Officer is responsible for insuring that all electric heating components are in stock at all times. In particular, Mechanic should insure that the development is well stocked prior to the start of the heating season (September 15th).
- RECORD KEEPING:** There are no special record keeping procedures. All work performed shall be recorded on the work order system and all stock purchased shall be recorded in the purchasing log and files.

ELECTRIC HEAT STOCK INVENTORY REQUIREMENTS

Building:

Thermostats

Model/Type:

Purchase from (state Central
Stores or name supplier)

Electric Base Board Units:

Type 1:

Size and Voltage:

Location in apartments:
Purchase from (state Central
Stores or name supplier)

Minimum to have on hand:

Type 2:

Size and Voltage:

Location in apartments:

Purchase from (state Central
Stores or name supplier)

Minimum to have on hand:

Type 3:

Size and Voltage:

Location in apartments:

Purchase from (state Central
Stores or name supplier)

Minimum to have on hand:

CENTRAL HEATING PLANTS

OBJECTIVE: To insure the continuous operation of all heating systems and equipment, including domestic hot water systems, and to prolong the life of all equipment and components related to heat.

POLICIES AND PROCEDURES

Daily

Assigned Mechanic Responsibilities:

(1) The assigned Mechanic is responsible for performing daily inspections and service of all central heating plants. The specific duties to be performed at each visit are detailed on daily check lists specific to the particular plant being service (attached), including regular disposal of rubbish and periodic sweeping and washing of floors. The assigned mechanic shall maintain a daily log of boiler room activities on a clipboard which shall be located inside the boiler room. This daily log shall be submitted weekly to the Maintenance Supervisor and contain a record of all activities performed.

As Needed

(3) The Maintenance Mechanic shall immediately report any problems to the Maintenance Supervisor, who shall relay them to the assigned Mechanic/Plumber. In the event of very urgent or emergency problem the Director of Operations will be notified.

Annually

Maintenance Supervisor Responsibilities

(1) The Maintenance Supervisor shall inspect the boiler room on at least a monthly basis as part of the Building and Grounds Inspection.

Weekly

Assigned Mechanic/ Plumber

(1) The assigned Mechanic/plumber shall perform no less than a weekly inspection of all boiler plants and shall perform additional maintenance at that time in accordance with the development maintenance checklist (attached).

Annually

(2) Each year the Maintenance Supervisor shall arrange to contract out or perform in-house boiler cleanings and arrange for insurance inspections at all developments. These boiler cleanings shall include all the work listed on the "Boiler Cleaning and Insurance Inspection Scope of Services" attached. All cleanings and inspections shall take place between the period of June 15 and August 31 of each year.

(3) Each year, the Maintenance Supervisor shall arrange in house burner Annually service and general preventive maintenance on all heating plant components. This service shall be performed in compliance with the "Burner Service Scope of Services" attached.

All service shall be completed each year between June 15 and September 15.

- (4) The Maintenance Supervisor shall develop a list of summer maintenance and replacement projects for heating plants and distribution system components, shall annually arrange to purchase appropriate stock, and shall plan and schedule the work to be performed by himself and the assigned Mechanic/ Plumber. The Maintenance Supervisor shall work with the manager to coordinate all such projects, including apartment access for apartment work.
- (5) The Maintenance Supervisor shall insure that all work performed on all heating systems by the assigned Mechanic / Plumber is recorded on the development work order system.

As Needed

Maintenance Supervisor Responsibilities

- (1) The Maintenance Supervisor has overall responsibilities for supervising all heating plant maintenance and repair.
- (2) The Maintenance Supervisor shall make all decisions concerning major repairs to heating plants and systems and shall approve all purchase orders for stock, boiler cleanings, annual preventive maintenance service, and other service or repairs.
- (3) The Maintenance shall work with the Modernization Department to determine priorities, select designers, develop designs and manage construction contracts for all major repair and replacement of heating systems and components.

RECORDKEEPING

- (1) The Building Mechanic's daily check list shall be submitted weekly to the Maintenance Supervisor; a copy shall be sent to the Building Manager and the original maintained in the Preventive Maintenance Service loose-leaf.
- (2) The Assigned Mechanic/Plumbers weekly inspection and service report will be submitted to the manager for filing in the Service Loose Leaf and a copy shall be submitted to the Maintenance Supervisor
- (3) Copies of all records of service and repairs performed including annual boiler cleanings and preventive maintenance service as well as other contracted repairs shall be maintained in the development's service loose leaf and by the Maintenance Supervisor.
- (3) Records of all repairs completed by the assigned Mechanic/ Plumber shall be maintained on the development's work order system.

CENTRAL HEATING PLANT SPECIFICATIONS AND STOCK INFORMATION

Building:

Number of Boilers:

Make/Model and Type of boilers:

Make/model type of burners:

Fuel Source:

Date of installation of

Boilers/burner

DHW - make/model/type/date of

installation/source of fuel

Location of boilers:

Key supplementary heating plant components:

List component/make/model/type

and date of installation:

Comments:

BOILER CLEAN AND INSURANCE INSPECTION SCOPE OF SERVICES

Boiler cleanings shall be performed annually by a qualified assigned Mechanic/Plumber. Following the cleaning, and prior to closing the boiler, the Maintenance Supervisor shall arrange for an insurance inspection. The following scope of services shall be adhered to:

Prior to Calling Inspector:

1. All firesides are to be properly brushed and vacuumed. This includes tubes in the firetube boilers and as passes in cast iron boilers.
2. All fireboxes are to be cleaned and vacuumed.
3. All handhole plates and manhole covers are to be removed and surfaces cleaned.
4. All controls and plugs are to be opened and flushed out.
5. The area around the boiler including the boiler itself (top, etc.) is to be cleaned and free of soot.

Prior to and during the Inspection:

1. Water shall be drawn off and the water side thoroughly washed out.
2. Manhole and handhole plates, washout plugs, as well as inspection plugs in water column connections shall be removed as required by the inspector. The furnace and combustion chambers shall be ~~cleaned~~ and thoroughly cleaned.
3. Grates apply ONLY to coal fired units.
4. Insulation and brickwork shall be removed as required by the inspector on order to determine the condition of the boiler, headers, furnace, supports or other parts.
5. Any leakage of steam or hot water into the boiler shall be prevented by disconnecting the pipe or valve at the most convenient point or at any appropriate means approved by the inspector.
6. Before opening the manhole or manholes and entering any part of a boiler which is connected to a common header with any other boilers, the required steam or water system valves or cocks between the two closed stop valves opened. The feed valves must be closed, tagged and preferably padlocked, and drain valves or cocks between the two valves opened. After draining the boiler, the blowoff valves shall be closed, tagged, and preferably padlocked. Blowoff lines, where practicable, shall be disconnected between pressure parts and valves. All drains and vent lines shall be opened.

This procedure applies to:

Mystic View
Mystic River
Clarendon
Jacques St.
Capen Court
Warren Ave.
Brady
Ciampa
Hagan
Highland

ANNUAL PREVENTIVE MAINTENANCE AND START UP SERVICES GAS FIRED BOILER SYSTEMS

Annual preventive maintenance and start up services shall be performed on all gas-fired boiler systems by a qualified Assigned Mechanic/Plumber in accordance with the scope of services below.

Scope of Services

1. Report upon arrival to SHA Representative
2. Inspect and report on conditions of refractory and heat exchanges.
3. Drain and recharge expansion tanks
4. Inspect all controls and safeties
5. Inspect pilot thermocouples
6. Tighten electrical connections
7. Open and clean low water cutoffs
8. Test all boilers, adjust manifold pressure, adjust fuel-air ratio and check sequences of operations
9. Prove function of pilot starts, limits, flow switches and operating controls
10. Adjust and calibrate indoor/outdoor sequencing control
11. Remove gas manifold and gas header
12. Remove pilots and burners
13. Clean orifice opening, pilots and burners
14. Reassemble burner and manifolds (replace burner gaskets)
15. Perform and efficiency test on each boiler and provide a written report to SHA of tests and tag with test results.
16. Submit report on boiler condition and any repair as required.

This section applies to:

Mystic View
Mystic River
Clarendon
Capen Court
Warren Ave.
Ciampa
Brady
Highland
Hagan

FLAT ROOF INSPECTION PROCEDURES

- OBJECTIVE:** To identify necessary maintenance, repair and replacement of building roofs to minimize damage to facilities resulting from faulty roofing.
- POLICIES AND PROCEDURES:** Assigned Maintenance Mechanics Responsibility:
- (1) Check roofs for obvious problems during all weekly walk through inspections, and carefully inspect roofs during the monthly Buildings and Grounds Inspections. Complete any clean up activities required, write work orders for any repairs needed, insure that work orders are completed. Report major problems to the Maintenance Department for correction. At least once per quarter, this inspection should take place during or immediately following a rainstorm.
 - (2) Flat Roof inspections shall include checking for:
 - a. Clogged drains and/or standing water.
 - b. Drain caps in place
 - c. Strainers in place/unbroken
 - d. Debris requiring removal
 - e. Unauthorized equipment attached to the roof requiring removal
 - f. Condition of penthouse doors and windows/hatch
 - g. Problems with exhaust fans
 - h. Sips of flashing disrepair
 - i. Signs of parapet wall disrepair
 - j. Any other obvious problem or defiance
- REPORTING AND RECORD KEEPING:** All roof inspection information shall be maintained on the walkthrough Inspection and Buildings and Grounds Inspection forms which are maintained in the B&G Loose-leaf notebook. Any records of work orders shall be maintained with the work order files. Records of any work completed by contractors shall be maintained with the work order files and Vendor Logs

PITCHED ROOF INSPECTION PROCEDURES

- OBJECTIVE:** To identify necessary maintenance, repair and replacement of building roofs to minimize damage to facilities resulting from faulty roofing.
- POLICIES AND PROCEDURES:** Maintenance Supervisor Responsibility:
- (1) Check roofs for obvious problems during all weekly walk through inspections, and carefully inspect roofs during the monthly Buildings and Grounds Inspections. Direct Maintenance Mechanic in any activities required, write work orders for any repairs needed, insure that work orders are completed by the mechanic, or contractors. Report major problems to the Maintenance Department for correction. At least once per quarter, this inspection should take place during or immediately following a rainstorm.
 - (2) Pitched Roof inspections shall include checking for:
 - a. Clogged or damaged gutters and downspouts
 - b. Condition of the fascia board.
 - c. Condition of roof tiles/roofing materials
 - d. Unauthorized antennas
 - e. Condition of flashing
 - f. Attic ventilation grills
- REPORTING AND RECORD KEEPING:** All roof inspection information shall be maintained on the Walk through Inspection and Buildings and Grounds Inspection forms which are maintained in the B&G Loose-leaf notebook. Any records of work orders shall be maintained with the work order files. Records of any work completed by contractors shall be maintained with the work order files and Vendor Logs

ROOF INFORMATION SHEET

Building:

Type of Roofing:

Date of installation/replacement:

Warranty - Yes or No?

If there is a warranty, indicate here the name, address and phone of the contractor

If there is a warranty, indicate here the name, address and phone of the manufacturer:

Date warranty expires:

Comments:

SMALL EQUIPMENT MAINTENANCE

OBJECTIVE: To ensure the continuous operation of the developments small equipment; in particular, lawn mowers and snow blowers.

POLICIES AND PROCEDURES:

Daily

Maintenance Mechanic/Groundskeeper Responsibilities:

The Maintenance Mechanic/Groundskeeper is the main caretaker of all lawnmowers and snow blowers. They shall insure that the equipment is wiped down after each use and is stored in an appropriate dry location. They shall drain the equipment of excess gasoline in the event that the equipment is stored within a residential building. They shall insure that adequate oil is in the equipment before each use. They shall use all such equipment with care so as to preserve its useful life.

Annually

Procurement Department Responsibilities

The Procurement Department shall be responsible for issuing purchase orders to reputable small equipment service companies for annual service and tune-ups to all lawnmowers and snow blowers. All snow blowers are to be serviced between April and October each year and newly serviced snow blowers must be on site before November 15 of each year. Lawnmowers are to be serviced between November 1 and April 1 of each year, but no later than April 15.

As Needed

RECORDKEEPING The Procurement Department shall maintain records of all service to lawn mowers and snow blowers in the annual Preventive Maintenance Service Loose Leaf.

SMALL EQUIPMENT INVENTORY AND CONTRACTOR INFORMATION

Building:

Lawnmower-
Manufacturer/model &
descriptive information:

Purchase Date:

Warranty yes or no?

If under warranty, indicate date
purchase, where purchased, name
and phone number, and end date
of warranty:

Snowblower
Manufacturer/model & descriptive
information:

Purchase Date:

Warranty yes or no?

If under warranty, indicate date
purchase, where purchased, name
and phone number, and end date
of warranty:

SERVICE CONTRACTOR INFORMATION

Date and number of PO

Company

For service on (name equip)

Address

Phone

Contact Person

Date and number of PO

Company

For service on (name equip)

Address

Phone

Contact Person

*Use additional pages if necessary for additional equipment and contractors.

TRASH CHUTES AND COMPACTORS

OBJECTIVE: To maintain trash chutes and compactors in as clean a manner as possible, discouraging pest infestation, and to maintain compactors in such a way as to prolong their life as much as possible.

POLICIES AND PROCEDURES: Maintenance Mechanic Responsibilities:
Check trash rooms to insure that all trash is removed or put down the chute.

Daily Maintain chute doors and trash room floors and walls in a clean condition.

For bag-type compactors: pull trash at least daily. Secure bags tightly and place into dumpster where possible. Where there is no dumpster, place bag in an out of the way location and insure that it is well secured to avoid odors and attraction to roaches or rodents.

For container type compactors: Pull containers in accordance with the schedule for pick up. Before returning the container to the building, wash out completely by spraying disinfectant and hosing down.

Wipe down all compactor surfaces daily with disinfectant. Sweep up and dispose of any trash or garbage that escapes from the chute.

In buildings where there is chute washing equipment in operable condition, the custodian shall wash down the chute on a weekly basis.

Weekly The Maintenance Mechanic shall report to the Supervisor any problems with the operation of the chute doors or the compactor immediately for correction.

As needed Manager Responsibilities:

The manager shall note the condition of trash rooms and the compactor and compactor room at each weekly inspection. Any needed repairs shall be completed by a contractor upon issuance of a purchase order by the Procurement Department

Weekly Once per year, the Procurement Department shall issue a purchase order to have the trash chutes steam cleaned by an appropriate contractor.

Annually
RECORD KEEPING The manager shall maintain records of cleanliness and any problems noted on the weekly building inspection forms. Maintain a copy of the PO and receiving report for the annual pressure cleaning of the chute in the Preventive Maintenance Service Loose Leaf.

TRASH COMPACTOR EQUIPMENT & CONTRACTOR INFORMATION

Building:

Number of Compactors:

Date of installation:

Warranty yes or no?

If warranty, note contractor,
dates of warranty, and phone
number:

Bag or Container Type?:

If bag, type, where is daily

trash bag stored?

If container type, what is the
pick up schedule?

Contractor Information for Trouble Shooting Compactor

Company

Name

Address

Phone

Contact Person

Contractor Information for Pressure Cleaning Trash Chutes

Company

Name

Address

Phone

Contact Person

Service

Service includes such work as lubrication, changing filters, changing belts, changing oil, etc. on various equipment. Small equipment such as lawnmowers and snow blowers should be serviced at least annually. Generators should be serviced quarterly. Heating systems must be serviced at various levels as frequently as daily; other service can be performed weekly, monthly, quarterly or annually. Tasks involved in service are very specific ("lubricate burner motor," "adjust hoses and belts," "replace oil lube filter". These specific tasks are detailed on each of the service checklist forms which will be found for various equipment and systems in this manual. All service requires some training; most service must be done by trained trades people, either on the SHA staff or contractors.

Repair

Repairs are made either as the result of an inspection, testing or service activity which identified a repair need, or when an item suddenly becomes dysfunctional. In general, preventive maintenance activities are performed both to prevent the need for repair and to identify repairs needed before they reach the point that they cause a complete malfunction. Some repairs are actually replacements but are usually considered a repair if the item being replaced is a minor component of the system. For instance, a belt might break and cause a malfunction; you will replace the belt, but this is considered a repair to the overall equipment.

Replacement

Replacement of an entire system or component should only occur when the system has met or exceeded its useful life. A roof, for instance, should last between 20 and 30 years. While you might need to make repairs to the roof after 10 or 15 years, a properly cared for roof should not need to be replaced until the 20 or 25 year point. The same applies to a variety of building systems. Very frequently, well cared for building systems can last well beyond their anticipated useful life.

2. Defining the Expectations

Responsibility

The Maintenance Supervisor is responsible for insuring that all preventive maintenance activities are carried out on schedule and properly recorded. At the same time, the Program's Maintenance Unit takes the lead responsibility for preventive maintenance on heating systems, elevators and alarms systems. The Maintenance Unit also serves as technical assistance when technical or difficult issues arise on all building systems. The Modernization Department takes responsibility for capital replacement of major building systems and equipment. In this context, the following specific responsibilities are assigned:

Maintenance Staff

(Includes manager's tasks, Maintenance Mechanic's task, and mechanic tasks as well as work performed by contractors under the supervision and direction of the Maintenance Supervisor)

- Daily Boiler room Inspections
- Annual replacement of Whalen Unit filters
- Weekly walk through inspections
- Monthly Building and Grounds Inspections
- Monthly test of emergency lighting systems
- Weekly inspection of generator
- Quarterly and annual generator service
- Annual testing and servicing of fire extinguishers
- Annual replacement of batteries in battery operated smoke detectors
- Annual or more frequent preventive clearing of main drain systems
- Annual steam cleaning of trash chutes
- Annual replacement and/or cleaning of window A/C filters
- Monthly inspection of roof and roof fans
- Annual clearing of main vertical and horizontal drains
- Regular cleaning of gutters and down spouts
- Regular care of trash compactors
- Annual service on lawn mowers and snow blowers
- Regular cleaning of elevators and tracks
- Weekly Inspection and service of Boiler Rooms
- Annual cleaning and state inspections of boilers
- Annual service on burners and other boiler components
- Monthly elevator service
- Annual Elevator Inspections
- Quarterly testing of fire alarm systems
- Major repairs to boilers, elevators, generators and alarms

Modernization Department

Replacement of major building systems and equipment

3. Tracking the Work Done

Critical to the completion of preventive maintenance work is maintaining accurate and complete records of all work completed.

Tracking will be accomplished through a series of record keeping mechanisms:

An annual buildings and grounds loose-leaf is established. A copy of all buildings and grounds inspections will be maintained in this book. In addition, the annual HQS form will be filed in the LUI book (with copies filed in the buildings and grounds book).

An annual Living Unit Inspection book will be maintained to record inspections of all apartments (including original of HQS buildings and grounds form). Instructions for maintenance of this book are found elsewhere.

An Annual Preventive Maintenance Service Loose-leaf will be established, with sections for each system, to record all service visits and work performed on all systems covered by this manual. Records to be included in this book should include copies of purchase orders, invoices, checklist and other reports of service, copies of elevator and alarm service slips and reports, and any other appropriate service record information.

The workorder system at each development will be used to maintain records of all work performed by in-house staff on the systems referred to in this manual as well as all other repair work occurring at the development (instructions for the work order system and maintenance of work order files are found in the Maintenance Office.

The purchase order filing system shall include the originals of all purchase orders, etc. and shall act as a back up filing system if necessary for preventive maintenance.

Instructions for filing of specific information is found in the Policies and Procedures sections of each of the building systems addressed in this manual.

In addition to this manual and the filing systems noted above, the Maintenance Department will be issuing a series of manuals and instructions for the new work order system, for routine maintenance and stocking of the development and for Living Unit Inspections. These manuals, taken together with the Preventive Maintenance Manual, will make up a full set of operational policies and procedures for maintenance of each development.

4. Annual Schedule of Activities

As a final step in preventive maintenance planning, an annual calendar of activities will be prepared for each development. This schedule will detail out daily and weekly activities, and schedule out all annual maintenance tasks for easy reference and manager planning. See section 14 for details and instructions.

PREVENTIVE MAINTENANCE MANUAL MASTER MANUAL

1	Introduction	
2	Development Profile	<ul style="list-style-type: none"> Photograph Physical Profile Site and floor plans Record of Capital Improvements
3	Building and Grounds Inspection	<ul style="list-style-type: none"> Policies and Procedures Standards and Expectations Instructions for use of Inspection Forms Weekly Walk through Form Building & Grounds: Low Rise Inspection Form Building & Grounds: Mid-Rise Inspection Form HQS Form
4	Electrical System	<ul style="list-style-type: none"> Battery Pack Emergency Lighting System Intercoms Emergency Pulls Transformers and SwitchGear (reserved)
5	Elevators	<ul style="list-style-type: none"> Policies and Procedures Elevator Specification Sheet
6	Fire Safety Systems	<ul style="list-style-type: none"> Master Panel Alarm System Fire Extinguishers Sprinkler & Fire Pump Battery Smoke Detectors
7	Generator	<ul style="list-style-type: none"> Policies & Procedures Specification Sheet Inspection and Service Forms
8	Heating System	<ul style="list-style-type: none"> Introduction Metrically Heated Developments Central Heating Plants Whalen Units Boiler Cleanings & Inspections Gas Fired Systems/Annual PM Oil Fired Systems/Annual PM Development Checklists: Resident Custodians Heating Supervisors
9	Plumbing Systems	<ul style="list-style-type: none"> Vertical Drains Horizontal Drains Domestic Hotwater Back Flow Preventer
10	Roof	<ul style="list-style-type: none"> Flat Roof Pitched Roof/Gutters & Downspouts

11	Small Equipment	Lawn Mowers Snow Blowers
12	Trash Chutes & Compactors	Chute Bag Type Compactor Container Type Compactor
13	Ventilation & A/C	Window Air Conditioners Roof Top Exhaust Fans Hallway Air Handling Unit Split System A/C
14	Schedule of Preventive Maintenance Activity	Schedules Annual Preventive Maintenance Service Loose Leaf

MAINTENANCE GUIDELINES

A. To Tilt: Raise lower sash 4", release sash plungers with pointed tool or thumb, support sash (may be heavy) and tilt in. Lower top sash 8" and repeat when restoring sash to vertical position, be sure that pivot bars stay in shoes, and that sash plungers engage Jamb-

B. To Remove Sash: Tilt sash 90 degrees, locate and slide spring-loaded pivot bar out of balance shoe and pull sash out of window to withdraw other pivot bar-

C. Pivot Bar Replacement: Loosen screw holding pivot bar and slide out of sash rail- Install new pivot bar and tighten screw, after checking that groove on bar is lined up with balance shoe-

D. Sash Plunger Replacement: Tap top rail off glass, remove old and insert new plunger.

E. Glass Replacement: Remove screw in each sash corner, tap rails off glass. Reinstall vinyl gasket on new glass and reassemble rails over gasket-

F. Spiral Balance Adjustment: Hook balance tool over exposed balance pin and pull rod out (hold firmly). Allow spiral to unwind, while counting turns. Add/delete turns as needed, keeping spiral rod less than 2" from tube end- Do not exceed 15 turns.

G. Balance/Shoe Replacement: Remove balance with screw at tube top- Remove shoe through frame notch which must be cut in jamb vinyl at top or bottom of jamb track.

H. Cleaning and Lubricating of Balance Shoe Track:

1. The balance shoe track's must be cleaned and lubricated at least once a year.
2. To clean, use a mild non-abrasive cleaner and wipe down the insides of the balance shoe tracks thoroughly.
3. Dry track with clean, dry cloth.
4. Lubricate by spraying the inside and outside of balance shoe track with silicone spray. A pure, non-petroleum base silicone spray is recommended.

Manufacturer of Aluminum & Vinyl Windows
123 Bath Street
Ballston Spa, NY 12020
(518) 885-9000 FAX (518) 885-0553800-999-9855

Service

Service includes such work as lubrication, changing filters, changing belts, changing oil, etc. on various equipment. Small equipment such as lawnmowers and snow blowers should be serviced at least annually. Generators should be serviced quarterly. Heating systems must be serviced at various levels as frequently as daily; other service can be performed weekly, monthly, quarterly or annually. Tasks involved in service are very specific ("lubricate burner motor," "adjust hoses and belts," "replace oil lube filter". These specific tasks are detailed on each of the service checklist forms which will be found for various equipment and systems in this manual. All service requires some training; most service must be done by trained trades people, either on the SHA staff or contractors.

Repair

Repairs are made either as the result of an inspection, testing or service activity which identified a repair need, or when an item suddenly becomes dysfunctional. In general, preventive maintenance activities are performed both to prevent the need for repair and to identify repairs needed before they reach the point that they cause a complete malfunction. Some repairs are actually replacements but are usually considered a repair if the item being replaced is a minor component of the system. For instance, a belt might break and cause a malfunction; you will replace the belt, but this is considered a repair to the overall equipment.

Replacement

Replacement of an entire system or component should only occur when the system has met or exceeded its useful life. A roof, for instance, should last between 20 and 30 years. While you might need to make repairs to the roof after 10 or 15 years, a properly cared for roof should not need to be replaced until the 20 or 25 year point. The same applies to a variety of building systems. Very frequently, well cared for building systems can last well beyond their anticipated useful life.

2. Defining the Expectations

Responsibility

The Maintenance Supervisor is responsible for insuring that all preventive maintenance activities are carried out on schedule and properly recorded. At the same time, the Program's Maintenance Unit takes the lead responsibility for preventive maintenance on heating systems, elevators and alarms systems. The Maintenance Unit also serves as technical assistance when technical or difficult issues arise on all building systems. The Modernization Department takes responsibility for capital replacement of major building systems and equipment. In this context, the following specific responsibilities are assigned:

Maintenance Staff

(Includes manager's tasks, Maintenance Mechanic's task, and mechanic tasks as well as work performed by contractors under the supervision and direction of the Maintenance Supervisor)

Daily Boiler room Inspections
Annual replacement of Whalen Unit filters
Weekly walk through inspections
Monthly Building and Grounds Inspections
Monthly test of emergency lighting systems
Weekly inspection of generator
Quarterly and annual generator service
Annual testing and servicing of fire extinguishers
Annual replacement of batteries in battery operated smoke detectors
Annual or more frequent preventive clearing of main drain systems
Annual steam cleaning of trash chutes
Annual replacement and/or cleaning of window A/C filters
Monthly inspection of roof and roof fans
Annual clearing of main vertical and horizontal drains
Regular cleaning of gutters and down spouts
Regular care of trash compactors
Annual service on lawn mowers and snow blowers
Regular cleaning of elevators and tracks
Weekly Inspection and service of Boiler Rooms
Annual cleaning and state inspections of boilers
Annual service on burners and other boiler components
Monthly elevator service
Annual Elevator Inspections
Quarterly testing of fire alarm systems
Major repairs to boilers, elevators, generators and alarms

Modernization Department

Replacement of major building systems and equipment

3. Tracking the Work Done

Critical to the completion of preventive maintenance work is maintaining accurate and complete records of all work completed.

Tracking will be accomplished through a series of record keeping mechanisms:

An annual buildings and grounds looseleaf is established. A copy of all buildings and grounds inspections will be maintained in this book. In addition, the annual HQS form will be filed in the LUI book (with copies filed in the buildings and grounds book).

An annual Living Unit Inspection book will be maintained to record inspections of all apartments (including original of HQS buildings and grounds form). Instructions for maintenance of this book are found elsewhere.

An Annual Preventive Maintenance Service Looseleaf will be established, with sections for each system, to record all service visits and work performed on all systems covered by this manual. Records to be included in this book should include copies of purchase orders, invoices, checklist and other reports of service, copies of elevator and alarm service slips and reports, and any other appropriate service record information.

The workorder system at each development will be used to maintain records of all work performed by in-house staff on the systems referred to in this manual as well as all other repair work occurring at the development (instructions for the work order system and maintenance of work order files are found in the Maintenance Office).

The purchase order filing system shall include the originals of all purchase orders, etc. and shall act as a back up filing system if necessary for preventive maintenance.

Instructions for filing of specific information is found in the Policies and Procedures sections of each of the building systems addressed in this manual.

In addition to this manual and the filing systems noted above, the Maintenance Department will be issuing a series of manuals and instructions for the new work order system, for routine maintenance and stocking of the development and for Living Unit Inspections. These manuals, taken together with the Preventive Maintenance Manual, will make up a full set of operational policies and procedures for maintenance of each development.

4. Annual Schedule of Activities

As a final step in preventive maintenance planning, an annual calendar of activities will be prepared for each development. This schedule will detail out daily and weekly activities, and schedule out all annual maintenance tasks for easy reference and manager planning. See section 14 for details and instructions.

**PREVENTIVE MAINTENANCE MANUAL
MASTER MANUAL**

1	Introduction	
2	Development Profile	<ul style="list-style-type: none"> Photograph Physical Profile Site and floor plans Record of Capital Improvements
3	Building and Grounds Inspection	<ul style="list-style-type: none"> Policies and Procedures Standards and Expectations Instructions for use of Inspection Forms Weekly Walk through Form Building & Grounds: Low Rise Inspection Form Building & Grounds: Mid Rise Inspection Form HQS Form
4	Electrical System	<ul style="list-style-type: none"> Battery Pack Emergency Lighting System Intercoms Emergency Pulls Transformers and Switch Gear (reserved)
5	Elevators	<ul style="list-style-type: none"> Policies and Procedures Elevator Specification Sheet
6	Fire Safety Systems	<ul style="list-style-type: none"> Master Panel Alarm System Fire Extinguishers Sprinkler & Fire Pump Battery Smoke Detectors
7	Generator	<ul style="list-style-type: none"> Policies & Procedures Specification Sheet Inspection and Service Forms
8	Heating System	<ul style="list-style-type: none"> Introduction Metrically Heated Developments Central Heating Plants Whalen Units Boiler Cleanings & Inspections Gas Fired Systems/Annual PM Oil Fired Systems/Annual PM Development Checklists: <ul style="list-style-type: none"> Resident Custodians Heating Supervisors
9	Plumbing Systems	<ul style="list-style-type: none"> Vertical Drains Horizontal Drains Domestic Hotwater Back Flow Preventer
10	Roof I	<ul style="list-style-type: none"> Flat Roof Pitched Roof/Gutters & Downspouts

11	Small Equipment	Lawn Mowers Snow Blowers
12	Trash Chutes & Compactors	Chute Bag Type Compactor Container Type Compactor
13	Ventilation & A/C	Window Air Conditioners Roof Top Exhaust Fans Hallway Air Handling Unit Split System A/C
14	Schedule of Preventive Maintenance Activity	Schedules Annual Preventive Maintenance Service Loose Leaf

MAINTENANCE GUIDELINES

A. To Tilt: Raise lower sash 4", release sash plungers with pointed tool or thumb, support sash (may be heavy) and tilt in. Lower top sash 8" and repeat. When restoring sash to vertical position, be sure that pivot bars stay in shoes, and that sash plungers engage Jamb-

B. To Remove Sash: Tilt sash 90 degrees, locate and slide spring-loaded pivot bar out of balance shoe and pull sash out of window to withdraw other pivot bar-

C. Pivot Bar Replacement: Loosen screw holding pivot bar and slide out of sash rail- Install new pivot bar and tighten screw, after checking that groove on bar is lined up with balance shoe-

D. Sash Plunger Replacement: Tap top rail off glass, remove old and insert new plunger.

E. Glass Replacement: Remove screw in each sash corner, tap rails off glass. Reinstall vinyl gasket on new glass and reassemble rails over gasket-

F. Spiral Balance Adjustment: Hook balance tool over exposed balance pin and pull rod out (hold firmly). Allow spiral to unwind, while counting turns. Add/delete turns as needed, keeping spiral rod less than 2" from tube end- Do not exceed 15 turns.

G. Balance/Shoe Replacement: Remove balance with screw at tube top- Remove shoe through frame notch which must be cut in jamb vinyl at top or bottom of jamb track.

H. Cleaning and Lubricating of Balance Shoe Track:

1. The balance shoe track's must be cleaned and lubricated at least once a year.
2. To clean, use a mild non-abrasive cleaner and wipe down the insides of the balance shoe tracks thoroughly.
3. Dry track with clean, dry cloth.
4. Lubricate by spraying the inside and outside of balance shoe track with silicone spray. A pure, non-petroleum base silicone spray is recommended.

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