

Template

FACILITY MAINTENANCE PLAN

WHITE MOUNTAINS REGIONAL SCHOOL DISTRICT SAU 36

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MISSION

The Facilities Maintenance Department will provide a safe, clean, orderly, cost-effective school environment that supports and contributes to the school district’s mission of educating our children to meet the life-long intellectual, physical, and emotional demands of the 21st century. The department will also provide highly maintained school facilities to support the needs of the community.

_____ Chair, Board of Education _____
Signature Date

_____ Superintendent of Schools _____
Signature Date

_____ Director of Facilities _____
Signature Date

This plan was last reviewed and updated on: _____
Date Initials

1 - SAFETY

General Safety Procedures

1. Emergency Phone Numbers: Fire __837-2655, 911_
Ambulance __837-2655, 911 Police__ 837-9086,
Poison Control_1-800-222-1222_
2. Wear appropriate clothing and Personal Protective Equipment (PPE) for the work being done.
 - a. Wear rubber gloves when cleaning washrooms or locker rooms or when using toxic chemicals.
 - b. Wear safety glasses or goggles when working close to liquid chemicals or when using hand tools.
 - c. Wear steel toe shoes or boots when operating lawn mowing equipment.
 - d. Wear hard hat when working beneath objects that may fall.
 - e. Wear approved helmet, apron, and gloves when welding
3. Follow manufacturers instructions when mixing chemicals. Always mix chemicals in a well ventilated area with spill protection.
4. Always read the Material Safety Data Sheet (MSDS) prior to working with new products for the first time or whenever there are questions about how to properly handle the material. MSDS will be available in the Maintenance Office and in each facility where the materials are used.
5. NEVER ever use chains and padlocks to secure exit doors. Security is of great importance. Students and staff will prop doors open and create other nuisances, but in the interest of safety, exit doors must function properly.
6. Always use proper lifting techniques when lifting heavy objects. Lift with the legs. Keep the back straight. Do not twist the body and lift at the same time. Request assistance.
7. The Lock-Out Tag-Out system will be utilized whenever working on electrical circuits.
8. Do not use tools that are broken or that have missing guards, shields, or other protective components. Report broken tools to the Maintenance Supervisor.
9. No employee is authorized to operate district owned or leased motor vehicles without first completing the district defensive driver training program.

10. All maintenance department employees shall complete asbestos training within 60 days of hire as required by federal law.

11. No employee shall attempt to perform tasks for which he or she has not been trained and authorized to perform by the Maintenance Supervisor.

Chemical Hazards

Use, Storage and Disposal of Chemicals:

Toxic, flammable, or otherwise hazardous chemicals are most commonly encountered in the custodial closets, kitchens, science laboratories, and storage rooms. It is very important to know how to use, store and dispose of chemicals and other hazardous substances used by technicians in their areas of responsibility. Safety precautions and guidelines for each of these three aspects of safe practices for chemicals are presented next.

Chemical Use:

No one should use any substance, even household products, without understanding what dangers exist and how to use the product safely. Chemical substances should be used only in the manner and for the purpose for which they were intended. Before using any chemical, the technician should learn about possible hazards, disposal and emergency treatment measures, and handling procedures. All of this information can be found on either the label on the product or its Material Safety Data Sheet (MSDS), which will be available at each site for all chemicals. The major safety precaution to take when working with chemicals is to avoid contact as much as possible. This can be accomplished in many ways. Among the points to remember when working with chemicals:

- Avoid using hazardous chemicals for any task that can be done some other way.
- If you must use a hazardous substance, always wear protective clothing (gloves, goggles, shoes) as appropriate.
- Mix chemicals only in approved combinations and to the proper dilution levels. Prepare mixtures in a safe area.
- Do not splash or spill liquids.

Chemical storage:

Proper storage of chemicals can avoid many accidents. Certain chemicals should not be stored near each other, because of the risk of combining fumes or spills. For example bleach and ammonia may leak or evaporate from improperly sealed containers. If these fumes combine, they react to form an extremely toxic gas. Acids with alkalis, and chemicals with petroleum products such as cleaning liquids, are also hazardous combinations. Other points to note about chemical storage:

- Never transfer chemicals into an unlabeled container.
- Store potentially flammable chemicals in approved containers and areas. NEVER store chemicals in electrical, mechanical, or boiler rooms.
- Keep chemicals away from sources of heat, such as furnaces or sunshine.
- Chemical storage areas should not be crowded and should have a systematic, easy

to reach arrangement.

Chemical Disposal:

Improper disposal of substances such as cleaning chemicals used on the job can cause serious problems. Material Safety Data Sheets contain information about the safe disposal procedures for the chemical substances used. Some general rules to follow:

- Never flush corrosive or volatile materials into the sewage system.
- Always discard unused portions of mixed chemicals unless information on the label specifically states the mixture may be kept for later use. If this is done, label and store the mixed solution properly.
- In case of spills properly dispose of materials used to clean up spill.

Fluorescent Light Bulb Recycling

Most fluorescent and mercury lamps are hazardous and require special handling. Nationwide, there are over 600 million lamps discarded each year. Until recently, regulations have made it difficult and expensive to properly manage used lamps and most end up in municipal landfills. Now the USEPA has included mercury lamps in the Universal Waste Rule (UWR), a new federal regulation that reduces the cost and regulatory burden on generators who recycle. The NH Department of Environmental Services enforces the Universal Waste Rule in New Hampshire.

**DO NOT THROW FLUORESCENT LIGHT BULBS IN SCHOOL DUMPSTERS
FOLLOW THE GUIDELINES BELOW TO PROPERLY DISPOSE OF THEM:**

Guidelines for packing and shipping Fluorescent lamps:

- Contractor can provide boxes to pack lamps and ballasts. Acceptable shipping containers include manufactures' boxes in which the new lamps were shipped, contractor provided four-foot, five-foot, eight-foot, T-26 and T-43 boxes. All other boxes, must be approved by Contractor prior to use.
- Fill boxes to capacity with lamps.
- All precautions should be taken to eliminate breakage of lamps. Extra charges may result from broken lamps.
- Do not tape lamps together. This results in excess handling of lamps and additional charges.
- If a box of lamps break, place the entire box in a plastic bag immediately. DO NOT open the box. Close and seal the bag. Notify the Contractor of any broken lamps prior to shipment.
- Contractor will complete the Lamp Recycling Manifest and leave a copy at the facility.
- Label boxes and accumulation "Spent Mercury-Containing Lamps for Recycling" along with the starting date of the accumulation.
- Must have at least 10 cases of bulbs for recycle before calling for pick up.

Contact the following Contractor for Fluorescent Light Bulb Recycling:

Electrical Hazards

Working with electricity can be a shocking experience for those not familiar with the hazards of this area. Besides the risk of electrical shock, many fires are caused by electrical misuse or malfunction. Receiving proper training and paying careful attention to safety precautions are important for any tasks involving electricity. Electricity is encountered throughout any school building. Particular electrical hazards occur in kitchens, workshops, and machine rooms. However, it is also possible to find such common hazards as damaged cords or equipment in areas where they might be overlooked – for instance, lounges and offices. The technician should be alert for such potential problems throughout the school. Coffee pots, hot plates, and microwave ovens are common hazards. Equipment with heating elements should be carefully monitored and not left unattended. Electrical hazards also exist any time a technician uses or services a vacuum, power tool or other piece of equipment. An understanding of what happens as a result of carelessness with electricity may help avoid electric shocks. Electric current flows through the path of “least resistance.” This path can be the human body, such as happens when a defective piece of electrical equipment is handled when standing on a wet surface. The risk of shock is lessened by the use of a grounding plug or wire, which provides a better path. Insulating the body, such as by wearing rubber gloves or rubber soled shoes, also helps. Here are some general points to remember about electrical safety:

- Never use defective equipment, or equipment with a cracked, frayed, spliced, or worn electric cord or missing the grounding plug.
- Always grasp the plug, not the cord, to unplug equipment.
- Outlets with Ground Fault Circuit Interrupt (GFI) protection devices should be available for use in all areas around water supplies and in damp areas.
- Always use GFI outlets for tasks involving electrical equipment when they are available. For example, use a GFI for power source for a wet/dry vacuum when picking up scrub water. Portable GFI outlets may be used for areas where they have not been permanently installed but are necessary for safety.
- Never use electrical equipment around liquids, unless designed for this.

Fire Hazards

Fire safety means both preventing fires and taking the correct steps if a fire should occur. Fire prevention is the responsibility of all building occupants, but the maintenance staff has a special role to play. Good custodial housekeeping practices (for example, keeping litter and debris out of buildings, cleaning equipment, and vents properly) are important precautions to take against fire hazards. The State Fire Code under RSA 153:5 regulates many safety practices in schools. Briefly, the code covers fire resistance ratings of building materials, use of smoke detectors and fire

alarms, storage of flammable and combustible materials, required means of egress and other related topics. Areas that often contain fire hazards are storage rooms that tend to accumulate trash, equipment rooms, furnace rooms, and the custodial closet. The custodian is in a unique position to recognize and eliminate potential fire hazards in many of these areas. Any time a problem is noted, the custodian should notify either the maintenance supervisor or a school administrator. Custodial tasks can sometimes affect the level of fire resistance of an area. In many cases, the structural integrity of all or part of a building is necessary for adequate fire protection. School staff members should never cause holes in partitions or doors, mar the surface of walls, floors, and floor coverings, or create gaps between frames and windows or doors without considering whether a possible fire hazard will arise. Damage is not the only way a fire hazard relating to building structures can be unintentionally created. By not using built in safeguards properly, the risk of fire damage is greatly increased. You should NEVER leave fire doors open, wedge smoke doors so automatic closing cannot occur or prop open doors or lids on flammable storage cabinets. The same is true for exit doors. There is never any justification for blocking routes of egress or for chaining exit doors, no matter how inconvenient a situation may be.

Four major sources of fire hazards are lightning, electricity, human carelessness, and chemical combustion. Lightning cannot be prevented, but its effects can be minimized by keeping buildings in proper shape. There are many other things the technician can do to eliminate many of these other hazard sources.

- Watch out for defective outlets and be sure they are not used until repaired.
- Never overload a circuit with extension cords or multiple outlets, and report any overloads that are noticed.
- Store flammable and combustible materials in approved containers, cabinets, or rooms.
- Debris should never be allowed to accumulate. Flammable materials and gas-powered equipment shall not be stored in electrical or mechanical rooms.
- Cleanliness is important in fire hazard areas such as electrical and mechanical rooms. Dust can be flammable so should be removed from surfaces and equipment frequently.
- Use extreme caution around fuel storage tanks. Any spark, or flame near damaged or defective valves or regulators could cause explosion as well as fire by igniting fumes that may have leaked out.
- Keep electrical equipment in good shape. Report strange noises or other unusual events observed about fan belts, gears, or any other part of a piece of equipment.
- Report any suspicious signs, such as a “burning smell”.
- Hallways, aisles, and doorways must never be restricted or blocked by objects that prevent fast exit in case of emergency.
- Know what actions to take in case of fire. Prompt action can save lives and property.

Fire Extinguishers

All maintenance staff members shall receive annual training in the proper use of fire extinguishers and in the selection of the proper type extinguisher for the type of fire.

If taking the time to use a fire extinguisher could put a life in danger.... DON'T.

Use the proper type fire extinguisher for the fire. Fire extinguishers have a rating on the faceplate, which shows which class or classes of fire it can put out. If you must use an extinguisher remember the PASS method:

- Pull the pin
- Aim the extinguisher nozzle at the base of the flames.
- Squeeze the trigger while holding the extinguisher upright.
- Sweep the extinguisher from side to side, covering the fire with the extinguishing agent.

Physical Hazards

Another important area for safety awareness is in physical activity, such as lifting heavy loads and working on a ladder. Physical hazards occur most frequently wherever the technician is working. Wherever a ladder, mop, tools, or other equipment is used, there is potential for accidents for either the technician or others. Stairs, hallways, mechanical or boiler rooms, and school grounds are all likely places for tripping, falls, or cuts. Many back injuries, broken bones and wounds could be avoided through awareness, carefulness, and proper training. There are many job factors in which the technician can change or improve to help avoid this type of hazard. In this section we will discuss lifting techniques, slip and fall hazards, ladder and stairway safety, power and hand tool safety and also dealing with the heat.

Proper Lifting Technique:

The steps to be taken when lifting a heavy object are listed below:

1. Size up the load. If too heavy to handle easily, get help or the proper equipment (such as a hand truck). Delaying the job a few moments to get assistance is better than risking an injury.
2. Check the route. Decide the safest path to take with the load; see that the way is clear; be sure that where the load will be placed is ready.
3. Get a firm footing and take a good grip—feet a little apart for good balance, one beside and one behind the object; keep back straight and aligned with the neck; bend knees, allowing legs instead of back to support the weight; grip the object with the whole hand including palms—not just the fingers.
4. Keep the load close to the body. tuck arms and elbows into the body, and center all body weight over the feet. Lift with a steady thrust, starting with the rear leg.
5. Never twist the body. Move the feet to change direction.
6. Bend knees to put down the load. Be sure fingers are not caught underneath the object as it is put down.

7. Wear proper protective gear, such as gloves, protective foot gear and other clothing, if the load requires special handling. For instance, wear protective gear when carrying liquid chemicals in containers that may leak, or objects with sharp edges.

8. When help is required to move a load, teamwork should be practiced and one person should call the signals.

REMEMBER:

PUSH, don't pull

MOVE, don't reach

SQUAT, don't bend

TURN, don't twist

Back Supports Help:

Support lower back and abdominal muscles

Reduce fatigue

Improve lifting posture

Act as a reminder

Back Supports DO NOT Make You Stronger

Slipping and Falling Hazards:

Most floors and other surfaces look safe. Each year however, thousands of accidents occur by falling or slipping. Falls are the second most common cause of fatal injuries. The technician must be aware of many factors that cause slipping and falling -- either of the technician or others in the school.

1. Clothing can cause falls of inappropriate for the job. Clothing should not be too long or loose. Shoes should be slip resistant, preferably with rubber or other grip type soles. Sandals, clogs, or flip-flops are NOT allowed on the job.

2. Be alert. Watch for things that can trip persons, such as wires, cords, litter, or equipment in the aisles and walkways. This is important both inside buildings and on the grounds. When possible, remove or rearrange such objects so they are not in the way.

3. Wet floors cause a particular hazard. When cleaning floors, place a "caution wet floors" sign to warn people using the area. Added protection is gained by roping off the area whenever possible. Floors should be cleaned when traffic is lightest and should be dried as soon as possible. If the task calls for walking on a wet surface, the technician should place feet carefully and move slowly.

4. Spills and leakage from trash barrels or bags can create another problem situation. Empty a leaking trash container and clean up the spill as soon as possible.

5. Falls are commonly caused by tripping over obstacles in walkways. The technician can thoughtlessly create this type of hazard for others on the school grounds. All equipment and supplies should be stored properly, out of the

walkways. Never leave tools or equipment lying around if they are not actually being used.

Stairway and Ladder Safety:

Working at a distance above the ground also creates a potential falling hazard. There are many custodial tasks that require the use of a ladder, scaffold, or other type of support. Stairways and ladders are among the most frequently used items on the job. Routine use of stairs and ladders can lead to carelessness. Accident figures show that traveling up and down stairs is not always as safe as it looks. Safety on ladders and stairways at your involves understanding what they were designed for and how to use them. Custodial staffs have a six, eight or ten foot stepladder and an extension ladder to assist them with the many job tasks.

SAFETY FIRST!

NEVER use a support that was not specifically designed for such use.

That is, use a stepladder not a chair.

One common portable ladder is the stepladder.

Stepladders:

- Stand by themselves

- Are not adjustable in length

- Have a hinged back

- Have flat steps that are 6 to 12 inches apart

- Open at least one inch for each foot of the ladders length.

- Rules for using stepladders safely:

 - Make sure ladder is fully open and the spreaders are locked.

 - Do not climb, stand or sit on the top two rungs.

Another common portable ladder is the extension ladder.

Extension ladders:

- Lightweight and durable

- Adjustable in length

- Made up of two or more sections that travel in glides or brackets

- At least 12 inches wide

- Not longer than 24-foot per section

- Rules for using extension ladders safely:

 - Have a co-worker help you raise and lower the ladder

 - Never raise or lower the ladder with the fly section extended

 - Be sure to secure or foot the ladder firmly before extending it

 - Set up the ladder with about three feet extending above the work surface

 - When using an extension ladder figure out and use the right set up angle or pitch. The distance from the foot of your ladder to the base of what it is leaning against should be about one fourth of the distance from the ladders top support to its bottom support

Inspection and Maintenance of Portable Ladders:

Ladders must be kept in good condition at all times. They need care and cleaning, especially when used in oily or greasy areas or left outside. Regular inspections will help make sure ladders are safe. Check each ladder in these ways:

- Look for broken or missing steps or rungs.
- Look for broken or split side rails and other defects.
- Feel for soft areas on wooden ladders.
- Check for rust or weakness in the rungs and side rails of metal ladders.
- Check fallen or misused ladders for excessive dents or damage.
- Tag defective ladders and remove from service immediately to prevent any accidents.

General Safety Tips for setting up and using portable ladders:

- Make sure the ladder will be standing on a firm level surface.
- Try not to set a ladder up in a passageway. If you must use a ladder in a passageway, set out cones or barricades to warn passers-by.
- Never place a ladder on an unstable base for more height.
- Use both hands for climbing.
- Hoist your tools if carrying them would keep you from using both hands.
- Don't stretch in order to reach something. Climb down and move your ladder.
- Use wooden or fiberglass ladders for electrical work or in areas where contact with electrical circuits could occur.
- Only one person should be on a ladder at any time. Whenever possible have an extra person hold the ladder steady.
- Do not use a ladder for anything other than a ladder.

Stairways: A stairway is a series of steps and landings that has four or more risers. Stairways let you move from one level to another. Most stairway accidents occur because technicians do not realize the hazards of climbing stairs. Some common causes

of stairway accidents are dangerously high stairways, poor lighting, poor housekeeping, and slippery or greasy steps. Some simple work practices will help you climb stairs safely:

- Pay close attention as you climb. On the way down look for the leading edge of each step.
- On poorly lit stairways be extra careful and take your time.
- Always use railings and handrails.
- Use the safe platforms provided when working on stairways.
- Clean up cluttered or slippery steps.

Using ladders and stairways properly is an important part of safeguarding your health. Choose the right ladder for each job, follow the basic rules for using it safely and perform regular inspections and maintenance. On stairways, pay close attention while you climb, use the handrails and help keep steps clean and free of clutter. Taking just a little extra care will enable you to climb stairways and ladders safely and with confidence.

Hand and Power Tool Safety

The school technician uses many tools for performing job tasks. It is easy to understand the need for safe working practices with, for instance, a large and powerful floor machine. However, even a small screwdriver can be hazardous if used improperly. Keeping tools in a state of good repair is an important way to avoid physical hazards. Ladders, jacks, hand trucks and all tools that are in good condition give more “margin of safety” to the technician using them.

1. Always use the proper tool for the job. Approach the use of a tool with respect and care. A moment’s carelessness can cost an eye, or worse.
2. Never use a defective tool.
3. Always wear protective gear such as gloves, goggles, and hearing protection when performing any task involving hazardous tool usage.
4. Do not overload a tool’s capacity or try to hurry its operation.
5. Disconnect power cord before adjusting tools, such as changing the blade on a skill saw.
6. Always be conscious of where parts of the body are in relation to the tool being used.
7. Keep tools in proper shape. A sharp knife is less dangerous than a dull one that must be forced through what is being cut.
8. Use only tools for which training has been received.
9. Do not reach into waste containers or push trash into a partly full container with bare hands.
10. Put waste with sharp edges in sturdy containers.
11. Be aware of sharp edges on furniture or other objects being moved. Even the edges of a cardboard carton can cut badly.
12. Do not put hands or head into places that have not been visually inspected for possible hazards.

Heat Stress

Your body is affected by heat stress on the job more than you might think. In addition to the medical hazards of heat stress, you are also more likely to have accidents in hot environments. A hot environment with high humidity may overload your body with heat. Wearing excessive amounts of clothing while performing heavy manual work in cold weather can have the same effect as a 95 degree day in the summer. This stress can result in a series of disorders ranging from sunburn to serious heat stroke. Your body metabolism produces internal heat during digestion, muscle activity, energy storage and breathing. In fact, your muscles release about 70 percent of their energy as heat. This warms your muscle and surrounding tissues. Since your body works well at a constant inner temperature of 98.6 ° Fahrenheit, your body works to keep your temperature at 98.6° in a process called thermoregulation. The amount of heat that stays stored in your body depends on the environment, level of physical activity, type of work, time spent working and number and length of breaks between work periods. In addition to recognizing signs of heat stress and knowing first aid measures, you can prevent heat

stress disorders through gradually getting used to the environment, proper work procedures and proper food and water intake.

2 - FACILITY INVENTORY

This plan applies to the following school facilities:

<u>School Name</u>	<u>Street Address</u>	<u>Town</u>	<u>Phone</u>
1. White Mountains Reg. High School	127 Regional Rd.	Whitefield	837-2528
2. Lancaster Elementary School	51 Bridge St.	Lancaster	788-4924
3. Whitefield Elementary	Rt. 3 Twin Mtn. Rd.	Whitefield	837-3088
4. Jefferson Elementary School	Liberty St.	Jefferson	586-4363
5. Dalton School	Rte 135	Dalton	837-9827

FACILITY INFORMATION
(Complete one page for each facility)

School Name:

Address:

Phone:

Grades Included:

Current Total Size (square feet)

Site Size (acres)

Date of Original Construction:

Dates and Description of Additions:

Identification and Distance to Nearest Fire Station (miles):

Water Supply (municipal or well):

Sewage Disposal System (municipal or onsite septic system):

Description of Fire Protection Systems (alarms, sprinklers etc.):

Date of most recent asbestos inspection:

Date of most recent fire safety inspection:

Date of most recent water test:

STRUCTURAL INFORMATION
(Complete one page for each facility)

Facility Name:

Roofs

Type (Flat, Pitched etc.)	Surfacing Material	Date Installed	Location
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Structural Frame Types

Exterior Cladding

Type(Brick, Vinyl Siding etc.)	Date Installed	Location
--------------------------------	----------------	----------

Exterior Doors

Type	Date Installed	Location
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Windows

Type	Date Installed	Location
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FLOORING
(Complete one page for each facility)

School: _____

<u>Type</u>	<u>Total Amount(SF)</u>	<u>Date Installed</u>
Carpet		
Vinyl Composition Tile (VCT)		
Vinyl Asbestos Tile (VAT)		
Sheet Vinyl		
Linoleum		
Hardwood (Gym)		
Quarry Tile		
Resinous Epoxy		
Exposed Concrete		

Diagram showing location of each flooring type

EQUIPMENT INVENTORY
 (Complete one page for each facility)

School: _____

Air Handling Units (AHU)	Location	Manufacturer	Model#	Serial #	Size	Date Installed
Unit Heaters	Location	Manufacturer	Model#	Serial #	Size	Date Installed
Packaged Units	Location	Manufacturer	Model#	Serial #	Size	Date Installed
Air Conditioning Equipment	Location	Manufacturer	Model#	Serial #	Size	Date Installed

EQUIPMENT INVENTORY
 (Complete one page for each facility)

School: _____

Unit Ventilators	Location	Manufacturer	Model#	Serial #	Size	Date Installed
Electrical Transformers	Location	Manufacturer	Model#	Serial #	Size	Date Installed
Main Electrical Panels	Location	Manufacturer	Model#	Serial #	Size	Date Installed
Sub-panels	Location	Manufacturer	Model#	Serial #	Size	Date Installed
Emergency Generator	Location	Manufacturer	Model#	Serial #	Size	Date Installed
UPS	Location	Manufacturer	Model#	Serial #	Size	Date Installed

EQUIPMENT INVENTORY
(Complete one page for each facility)

School: _____

FIRE PROTECTION EQUIPMENT (Type, manufacturer, date installed, location of control panel):

SECURITY EQUIPMENT (Type, manufacturer, date installed, locations):

ELEVATORS (Manufacturer, date installed, capacity, date of most recent inspection, service contractor):

TELECOMMUNICATIONS EQUIPMENT (Type, manufacturer, date installed, locations):

INTERIOR BLEACHERS (Manufacturer, model, date installed):

OUTSIDE GROUNDS
(Complete one page for each facility)

School: _____

Athletic Fields

Type	Surface	Quantity	Date Constructed/Renovated
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Playgrounds

Apparatus	Manufacturer	Quantity	Date Installed
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Parking Lots

Number of Spaces	Date Last Sealed
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3 - MAINTENANCE STAFFING

District Level Staff

Position Title	Number Authorized	Number FTE
----------------	-------------------	------------

Total Number of District Facilities: _____

Building Level Staff

(Complete for each facility)

Position Title	Number Authorized	Number FTE
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Average daily space cleaned per custodian: _____ Square Feet

NEW EMPLOYEE ORIENTATION CHECKLIST

NAME _____

POSITION _____

DATE OF HIRE _____

_____ ID Badge

_____ Locker

_____ Uniforms

_____ PPE

_____ Copy of Maintenance Plan

_____ Safety Training

_____ Ladders

_____ Hazardous Materials

_____ Electrical

_____ Lifting Techniques

_____ Use of Pesticides

_____ Asbestos Training

_____ Defensive Driver Training

_____ CPR

_____ IPM

_____ Pesticide License

4 – CUSTODIAL SERVICE

CUSTODIAL CLEANING FREQUENCY

Entrances, Lobbies and Corridors

These areas are generally the first areas seen by students, staff and visitors. Their condition and cleanliness leaves a lasting impression on all that enter the building. It is of the utmost importance that these areas are maintained to a standard of excellence.

Considerable dirt is carried in and de

posited in entryways and corridors. The custodian's schedule should include adequate time to sweep these areas of travel more often than once a day. Regular sweeping or snow removal from the sidewalks outside of entryway doors will prevent some dirt and sand from entering the building. Snow and ice should be removed from the entryway as soon as possible using sand or ice melt to avoid slips and falls. Use only those ice melt products that are approved by the school district. Some entryways have floor mats to serve as a dirt and sand trap. These must be cleaned periodically, or daily during the 'mud' season. Entryway carpet is cleaned most effectively with an extractor running the rinse cycle 1-3 times. Fans need to be on during this process to speed drying and help prevent mildew.

Daily:

- Empty waste receptacles, remove debris, police entrance for snow, leaves, and litter, and remove.
- If floor is resilient tile, dust mop floors with a wide, treated dust mop, keeping the dust mop head on the floor at all times. Pick up soil from floor with dustpan. With a lightly dampened mop, spot-mop floors as necessary to remove soil.
- Vacuum carpet areas and mats; remove gum and soil spots.
- Disinfect drinking fountains. (*see following procedures*)
- Clean entrance door glass.

Weekly:

- Dust the tops of lockers, fire closets, extinguishers and window casings. (Low dusting, below 5')
- Clean glass partitions, display cases, and interior door glass.
- Spot-clean finger marks and smudges on walls, door facings, and doors. Use detergent solution in spray bottle and a cloth.
- Dust Furniture.
- Restore floor finish on non-carpeted floors.

Monthly:

- High dust vents, lights, pipes, window blinds, over doorways, hanging light fixtures and connecting and horizontal wall surfaces. (High dusting, above 5')

Note: When cleaning stairways, on a routine schedule clean out the corners and the edges of each step. Remove gum, etc. with a putty knife. Damp mop or spot clean as necessary.

Classrooms and Laboratories

There is more time spent in classroom cleaning than any other phase of custodial duties. Valuable time and many steps can be saved by careful planning. Due to the many different types of furniture and equipment used in the classroom, a careful analysis should be made to determine how to clean each room in the shortest time with the fewest steps and still maintain the required standard of cleanliness. To keep a classroom clean will entail much more than just sweeping the floor and dusting the furniture. It will require a technician with a willingness to work, a custodian who takes pride in his/her work and one who is interested in the welfare of the youngsters. Some classrooms will have desks that may be shifted from side to side each day as you clean the floor, while others have tables that can only be moved a few inches. Some furniture in the rooms can be rolled away from the wall to make sweeping easier; other furniture is stationary and must be cleaned around and underneath. Tables and desks must be wiped off with disinfectant. The custodian's cart will hold the necessary equipment and materials to clean classrooms.

Classrooms should have adequate lighting. Check for burned out tubes or bulbs and replace them with bulbs of the same wattage. Properly dispose of used fluorescent tubes.

Daily:

- Empty waste receptacles and replace liners.
- Clean marker boards, chalk boards and chalk trays.
- Vacuum traffic patterns on carpets floors; remove gum and soil spots.
- Dust mop and wet mop tiled floors.
- Clean glass in doors and partitions.

Weekly:

- Dust furniture surfaces and damp clean desk and table tops. (low dusting, below 5 feet)
- Empty pencil sharpeners.
- Vacuum carpeted areas thoroughly.
- Clean door surfaces.

Twice Monthly:

- Restore floor finish on non-carpeted floors.

Monthly:

- High dust vents, lights, pipes, window blinds, and connecting vertical and horizontal wall floors. (high dusting, above 5 feet)
- Vacuum upholstered furniture.

Office, Lounge and Conference Rooms

Most of the same cleaning procedures, as outlined for 'Classroom Cleaning' in the previous section, can be followed for cleaning office areas, faculty lounges, conference rooms, libraries, media center areas, etc.

Daily:

- Empty waste receptacles and damp clean.
- Clean chalkboards and chalk trays and dry erase marker boards.
- Vacuum traffic patterns on carpeted floors and remove gum and soil spots.
- Dust mop and wet mop tiled floors.
- Clean glass in doors and partitions.

Weekly:

- Dust furniture surfaces and damp clean tabletops. (low dust below 5 feet)
- Empty pencil sharpeners.
- Vacuum carpeted areas thoroughly.
- Clean door surfaces.

Monthly:

- Restore floor finish on non-carpeted floors.
- High dust vents, lights, pipes, window blinds, and connecting vertical and horizontal wall surfaces. (High dust above 5 feet)

Restrooms, Locker Rooms and Showers

Daily:

- Empty waste receptacles and change liners.
- Thoroughly clean and disinfect toilets and urinals.
- Thoroughly clean and disinfect shower rooms and dressing rooms.
- Restock dispensers: soap, paper towel, toilet tissue and sanitary napkins.
- Clean mirrors; clean and disinfect urinals and stools; clean basins; polish stainless steel and chrome surfaces.
- Spot wash walls, lockers, and partitions.
- Dust mop and wet mop floors with disinfectant solution.

Weekly:

- Damp clean and polish partitions thoroughly.
- Pour at least one gallon of water down floor drains.

- Dust wall and ceiling vents.
- Clean doors and wall tile.

Twice Monthly:

- De-scale fixtures.
- Scrub floor with floor scrubber.

Cafeterias and Lunch Areas

Daily:

- Clean table tops with disinfectant.
- Empty waste receptacles and replace liners.
- Dust mop and wet mop tiled areas.
- Vacuum carpeted areas and mats, remove gum and soil spots.
- Disinfect drinking fountains.

Weekly:

- Clean glass partitions, display cases, and interior door glass.
- Spot clean walls.
- Dust furniture, fire closets and extinguishers. (low dusting, below 5 feet)
- Restore floor finish on non-carpet floors.

Twice Monthly:

High dust vents, lights, pipes, window blinds, and connecting vertical and horizontal wall surfaces. (high dusting, above 5 feet)

Monthly:

Thoroughly clean furniture.

Shop Areas

Daily:

Empty waste receptacles and replace liners, dust mop or sweep floors; and spot - mop floors.

Twice Monthly:

Dust sills and ledges; spot - clean walls

Monthly:

Mop floors with detergent solution and buff floors coated with floor finish or wax.

Gyms and Multipurpose Rooms

Daily:

- Empty waste receptacles and replace liners.
- Dust mop court floors and spot clean using recommended treatment for dust mop.
- Clean glass in doors and partitions.
- Clean and disinfect drinking fountains.
- Vacuum traffic patterns on carpeted floors; remove gum and soil spots.
- Dust furniture.
- Dust mop and wet mop tiled floors.
- Spot clean walls; remove graffiti.

Weekly:

- Vacuum carpeted areas thoroughly.
- Clean door surfaces.
- Vacuum upholstered furniture. Clean all wooden and vinyl furniture. (low dusting, below 5 feet)
- Clean and polish brass or chrome.
- Spray buff tiled floors; remove scuffmarks.

Monthly:

- High dust (above 5') or vacuum vents, lights, pipes, window blinds, drapes, connecting horizontal and vertical wall surfaces.

Annually:

- Reseal floor using manufacturer's recommended procedures and finishes.

CUSTODIAL METHODS AND PROCEDURES

Assembling Equipment and Supplies

At the beginning of each shift, the custodian should assemble all tools and materials needed to clean thoroughly. This will minimize frequent return trips to the custodial closet to get something else.

- Custodian cart with caddy
- Spray bottles with appropriate solutions to clean glass, counters, sinks, disinfect surfaces, and spot cleaning
- Dust cloths
- Paper towels
- Putty knife/razor blade scrapper
- Dust mop (treated if needed)
- Wet mop (if needed)
- Mop bucket and press (if needed)
- Vacuum cleaner complete
- Plastic liners (small and large)
- Counter brush
- Dust pan
- Gum remover
- Protective glasses and gloves

Drinking Fountains

If drinking fountains are not cleaned regularly and correctly, they can become a health hazard. The public expects clean drinking water, therefore it is the responsibility of the custodian to keep the drinking fountains clean and sanitary. Drinking fountains should be cleaned daily using the following methods:

1. Use spray bottle or bucket with water and detergent/disinfectant solution to spray or wipe solution over all surfaces.
2. Agitate with clean cloth, small brush, or paper towel.
3. Rinse.
4. Use clean cloth or paper towel to wipe dry and polish chrome and other surfaces.
5. Adjust the bubbler so that the water stream is the correct height (not hitting the spout and not spraying).

Chalkboards and Marker Boards

Be sure to check for information to remain on the board before cleaning.

1. Most chalkboards can be cleaned by simply erasing with a clean felt eraser and wiping with a clean cloth.

2. Water is not recommended for most chalkboards as the water plus chalk equals glue and will fill the chalkboard pores, giving a poor writing surface.
3. Some of the newer boards require washing as they are not designed for chalk. If you are not sure, check with your supervisor.
4. An eraser and treated dusting cloth can be used to remove the fine chalk dust if necessary.
5. On occasion, as assigned, fine cleanser can be used carefully on some chalkboards to restore “bite”.
6. The chalk tray can be damp wiped at this time or vacuumed out later while vacuuming carpet. Vacuum erasers, if needed.
7. Use only solutions recommended by the manufacturer when cleaning “Dry Erase Marker Boards”.

Dusting

From the standpoint of health as well as appearance, dusting is one of the most important jobs of the custodian. Dust can be a carrier of disease germs. Visible dust presents a dirty appearance that needs to be taken care of as soon as possible.

A vacuum cleaner is the best tool for removing dust.

Treated “dust cloths” can be used for most dusting. These are usually rolls of factory treated flannel cloth.

Some surfaces lend themselves well to ‘damp dusting’ using a clean cloth and plastic sprayer with appropriate solution. Where students eat at their desks, the desk tops are to be cleaned daily with a district-approved disinfectant.

Dust all horizontal surfaces such as window ledges, sills, files, counter tops, and desks. Inspect student desk tops and spot clean them to remove heavy soil, heavy marking or graffiti.

As a general rule all horizontal surfaces less than 5’ will receive a thorough dusting weekly. Horizontal surfaces greater than 5’ will receive a thorough dusting monthly. Some surfaces may require spot dusting on a daily basis.

Note: Lock all windows when you clean the sills.

Cleaning Classroom Sinks and Counters

1. Clean sinks and replenish paper towels and hand soap daily. Clean sinks by using plastic sprayer with disinfectant/detergent solution. Spray and wipe dry with a paper towel, or use fine cleanser, rinse and wipe dry with clean cloth or paper towel.
2. Spray solution on counter and wipe clean with clean cloth or paper towel.

Dust Mopping Resilient Floors

If the floor is resilient type either totally or partially, the following is recommended:

1. Pick up large pieces of paper or other debris before starting to clean.
2. Use treated dust mop and carefully dust mop all resilient floor areas. Clean under all desks, equipment, etc. that are off the floor.
3. Dust mop debris to one area for pick up with counter brush and dust pan.
4. Dust mop may be lightly shaken or vacuumed to remove dust. Do in appropriate area.
5. Retreat dust mop as necessary by lightly spraying with dust oil and allow setting before using, or hanging up.
6. If area is carpeted, with a strip of resilient flooring, it is permissible to sweep dust onto carpet for pick up when vacuuming.

Trash

Empty all trash receptacles. Do not reach into the receptacles, but carefully dump the contents of the receptacle into the waste collection bag. Damp wipe soiled receptacles. Replace plastic liners only when soiled or otherwise needed.

Note: Remove lunch trash immediately following lunch. Use ramp or steps provided when throwing trash into dumpsters. Do not throw over your head. This will minimize injury.

Carpet Vacuuming

The vacuum cleaner is the most effective tool to remove soil from many surfaces, especially carpeting.

1. Move furniture in room only as necessary to vacuum all areas of the carpeting.
2. Pick up large pieces of paper and other debris before vacuuming (perhaps teachers and students may be asked to assist).
3. Vacuum all carpeted areas, getting under desks, furniture and equipment that is off the floor.
4. Vacuum chalk trays (if not already done) and erasers (as needed).
5. Replace all furniture.
6. Look for and clean up spots or soiled areas on carpeting using plastic sprayer, appropriate cleaner, and clean cloths or paper towels. Remove gum by using gum remover-follow manufacturer's instructions.

Spot Cleaning

1. Spot clean walls, doors, and ledges as previously recommended. Spot clean daily in carpeted areas where students are eating. Use clean cloth or paper towels and detergent solution in plastic spray bottle.

2. Spot clean glass in doors and partitions and on the inside of windows to remove smudges as previously recommended. Use soft, lint free, clean cloth or paper towels and glass cleaner in plastic sprayer.
3. Dust or clean vents in ceilings of classrooms, offices, etc. as previously recommended.

Before leaving the room, visually check to make sure all the following duties are completed:

- Windows are locked.
- All items are in appropriate place.
- Room looks clean and - is clean!
- Lights are turned off.
- Door is locked.

Restroom Cleaning

The job of cleaning and disinfecting your rest rooms is not a difficult one, if the work is done efficiently and daily as it should be. Modern fixture design usually makes cleaning them fast and effective if proper procedures are followed. Remember that deodorant blocks are not permitted. Deodorants do not clean or sanitize, but merely cover up one odor with another. Clean rest rooms are important for a number of reasons:

- Bacteria control to help eliminate cross infections to safeguard health.
- Many times the custodial staff is judged on the appearance and cleanliness of the rest rooms.
- Clean rest rooms encourage the public to help keep them that way.
- Clean rest room fixtures greatly reduce the possibility of offensive odors (and complaints).
- The most frequent lingering cause of odors in rest rooms is due to uric acid salts. Remove these salts through proper cleaning procedures and the odors are gone! Rest rooms also require adequate ventilation.

Refilling Dispensers

1. Check all dispensers daily to insure adequate supply.
2. Refill all dispensers as required (including toilet paper dispensers).
3. Interfold the bottom sheet with the remaining top sheet in the dispenser when adding paper towels.
4. Check the working condition of the units.
5. Close and lock dispenser.
6. Spray the surfaces with germicidal/disinfectant solution and wipe dry with paper towel. At the same time check the soap valve to assure proper operating condition.
7. Clean the surface of the dispenser as above.
8. Fill all soap dispensers.
9. Stock the sanitary napkin/tampon dispenser.

10. In the women's restrooms, it is essential that the sanitary napkin/tampon machine be stocked at all times. If the machine becomes inoperable, it must be repaired or reported promptly.
11. Unlock the machine.
12. Refill machine correctly to ensure that it will dispense napkins properly.
13. Close and lock the machine.

Cleaning Sinks and Wash Basins

Several methods can be used to clean sinks with equal final results, however, the following is recommended:

1. Use spray bottle with germicidal/disinfectant solution and spray sink (inside and outside), faucets and adjacent wall areas.
2. Let sit a minute, and then scrub with paper towel, clean cloth, or brush. (Paper towel preferred.)
3. Use a small amount of fine cleanser if necessary.
4. Rinse as necessary and polish with clean cloth or paper towel.
5. Wipe walls adjacent to sinks to remove grime, spots, etc. as above.
6. Clean pipes underneath sinks daily as part of the procedure.
7. Do not use lime de-scaler on counter tops.

Mirrors

Mirrors in rest rooms are easy to keep clean by spraying lightly with glass cleaner or germicidal/detergent solution and wiping dry and/or polishing with a clean, lint free cloth or paper towel. Never use an abrasive cleaner or acid or dirty cloth on mirror. These may mar or scratch surface. Avoid using excessive water as it may get into the frame backing and damage the silvering.

Urinals and Toilet Bowls

Wear rubber gloves at all times. This is for your personal protection.

To clean inside bowl:

1. Flush toilet and/or urinal.
2. Use hospital disinfectant from dispensing system-follow manufacturer's instructions.
3. Use cotton swab (poodle tail) and/or toilet brush and swab inside of bowl using solution.
4. Scrub as necessary-be sure to swab solution up and under the flush rim. Scrub thoroughly.
5. Flush toilet or urinal and rinse swab or brush in clean water before proceeding to next fixture.

To clean seat and outside of fixtures using sprayer:

1. Spray germicidal/disinfectant solution on toilet seat (both sides), and all of the outside surfaces of the fixtures (toilets and urinals).
2. Let stand a minute or so.
3. Wipe dry with paper towels starting with the top of the seat, then underside and finally the balance of the fixture down to the floor.

Note: This procedure is the most effective way to sanitize a fixture, because you are always using clean solution with no chance of cross-contamination. Also, plastic spray bottles or one (1) gallon pressure sprayers can be used.

Note: Be sure to spray plunger with disinfectant after use. Keep in a bucket when not in use.

Bathroom Walls and Partitions:

1. Spray or damp dust with a germicidal/detergent solution on surfaces such as ledges, partitions, dispensers, wainscoting, shelves, areas around urinals and toilets, and lower walls as necessary.
2. Use either sprayers or bucket with germicidal/detergent solution, paper towels, clean cloths or a brush.
3. Wipe dry, if necessary, with paper towels or clean cloth to prevent streaks and spotting.

Additional Notes

To discourage graffiti, always remove it right away. Test chemical or cleaner in an obscure area prior to use. In older buildings it may be necessary to paint the stalls frequently to maintain desired levels of appearance.

Bathroom and Shower Floors: (Does not include wood floors)

The floors are made of a variety of materials. Some judgment is necessary as to the use of strong chemicals and excessive amounts of water. If the floor can be damaged by over-wetting, substitute with light damp mopping.

1. Mix mopping solution per manufacturer's instructions.
2. Use clean, wet mop and wet down the floor thoroughly with the solution (damp mop if floor would be damaged as above).
3. Let stand a few moments for the chemicals to work.
4. Agitate the solution with your mop as needed.

5. Pick up soiled solution with mop, floor squeegee, and pick-up pan or floor drain, or use wet-vac for pick up. Clean all corners and edges. (Scrape if necessary.)
6. Return all receptacles to proper position.

Note: Do not rinse floor as we want to take full advantage of the residual benefits of the germicide. Before leaving the rest room, take a quick visual check of the area and see if it smells clean and looks clean! Be proud of doing the job well.

Shower Rooms, Locker Rooms and Dressing Rooms

Trash

1. Empty all trash containers (including small pieces of soap and other debris) into cart.
2. Reline containers with plastic liner.
3. Spray or wipe containers with germicide/disinfectant solution. Wipe dry with clean cloth or paper towel.

Benches Furniture and Lockers

1. Spray or wipe (with cloth) with germicide/disinfectant solution and scrub or wipe dry with clean cloth.
2. Spot clean walls and lights as needed (as above). Replace burned out lights.
3. Replenish paper towels, soap, etc. Clean dispensers and lock.

Showers

1. Wipe down walls with germicide/disinfectant solution and cloth, wedge mop, sponge mop, or brush. Let solution stay on walls a few minutes to allow chemicals to work.
2. Scrub or agitate solution to loosen soil and scum. Rinse with clean water.
3. Polish handles, shower heads, and other hardware and wipe dry.
4. Clean hair, etc. from shower drain.

Floor Surfaces

The flooring surfaces vary considerably in the different buildings, however, the following is recommended:

1. Sweep or dust mop (treated) floor to remove large pieces of paper and other debris.
2. Pick up towels, socks, shoes, etc. and store appropriately (PE teachers and students should assist).
3. Lightly flood floors with germicide/detergent solution and warm water.
4. Let stand 3 minutes or more for chemical action.
5. Agitate or scrub with wet mop, brush (long handled), or power buffer, if necessary.
6. Pick up soiled solution with mop, squeegee to drain, or wet vacuum up.

Note: Rinsing not necessary as the residual benefits of the germicide are desirable. Clean all equipment and store properly.

Vomit Cleanup

Clean up vomit as soon as possible and always use gloves. Follow the instructions below:

1. If on carpeting only, use absorbent granules, sweep, then extract with disinfectant and dump waste directly into basin.
2. Clean off furniture.
3. Clean all equipment and store properly.

Gym and Multi-Purpose Room Floors

These areas present two (2) different types of flooring material (wood and resilient flooring), therefore each type of flooring will be addressed here.

Resilient Floors

These include such flooring surfaces as asphalt tile, hard vinyl tile, sheet goods, and resilient 'poured' floors. Most of the custodian's work in these areas will consist of floor

care procedures, with a limited amount of time spent dusting or cleaning benches, bleachers, or chairs.

1. Use treated dust mop using factory recommended treatment to clean floor. Do not 'sweep' with dust mop as this will scatter dust into the air. Keep dust mop on the floor and clean in long 'runs'. Clean out dust mop by carefully shaking where appropriate or clean with vacuum cleaner.
2. Re-treat lightly with 'mop dressing' as needed.
3. Pick up dust and debris with dust pan and counter brush or with vacuum and dispose of trash.
4. Wet mop total floor or damp mop as needed to remove spots. Use detergent and water solution. Agitate with wet mop or lightly scrub with buffer if necessary.
5. Pick up soiled solution.
6. Reseal as necessary (floors are sealed when new).
7. High speed buff as needed. Very effective way to clean and repair floor.
8. Spray buff as needed. Very effective, spray as you go.

Maple Wood Floors-Follow manufacturer's instructions.

Daily:

1. Pick up and dispose of debris.
2. Remove chewing gum.
3. Dust mop floor with a clean and properly treated mop.
4. Wipe floor with bare hand to test if dust remains on the floor. If dust is detected, repeat step No. 3.
5. For normal soil removal, use a waterless cleaner suitable for wood surfaces and as recommended by the manufacturer.

Monthly:

1. Remove rubber burns and floor marks with a solvent-dampened cloth as recommended by the manufacturer.
2. Tack or damp-mop floor with solvent cleaner.

Annually:

1. For lightly worn floors, a light "screening" may be required and one coat of floor finish. Consult manufacturer for approved finishes.
2. For badly worn or damaged floors, consult your installer to determine if heavy screening or sanding is needed.
3. Don't use an automatic scrubber on wood floor.
4. Don't allow water or liquids to stand on floor.
5. Most manufacturers recommend maintaining relative humidity between 35-50% year round.

5 - GROUNDS MAINTENANCE

Summer

- Grass shall be cut based on weather according to the schedule established by the Grounds Supervisor.
- Athletic fields shall be overseeded and resodded as necessary.
- Grass shall be irrigated as necessary based on weather.
- Playgrounds and outdoor bleachers shall be inspected annually for general condition of components and tightness of connections. Every two years bleachers must be inspected by a licensed engineer, architect, or individual certified by the manufacturer as required by the Life Safety Code.
- Asphalt surfaces shall be sealed every five years.
- Running tracks and tennis courts shall be sealed every five years.

Fall

- Grass cutting shall continue until the growing season has ended.
- Fall athletic fields shall be marked prior to the first competition and as necessary thereafter.
- Leaves shall be raked and removed weekly.
- Trash shall be picked up and trash containers emptied after every event.

Winter

- Snow and ice shall be removed from entry ways and sidewalks at least 30 minutes prior to the start of school for the day.
- Sidewalks and entry ways shall be sanded as necessary.
- When snow continues to fall after the start of the school day, the main entrance shall be cleared hourly. Other entrances and sidewalks shall be cleared at least every two hours.

- The snow plowing contractor shall clear all parking lots and driveways at least one hour prior to the start of school. A decision to plow once school has started shall be made by the Grounds Supervisor in cooperation with the School Principal. Maintenance staff shall assist in coordinating the movement of vehicles as necessary.

Spring

- All grass surfaces shall be raked as soon as weather conditions allow.
- All storm drains and culverts shall be cleared of debris.
- Mulch shall be placed around planted shrubs.
- Pesticides shall be applied as directed by the Grounds Supervisor.
- Spring athletic fields shall be marked prior to the first competition and as necessary thereafter.
- Trash shall be picked up and trash containers emptied after every event.

Playground and Bleacher Maintenance

The purpose of the playground and bleacher inspection is to identify and correct problems with the impact material and to ensure safety and operation of play equipment. Two types of inspections will be utilized.

- Routine (Daily)
- Periodic (Weekly during heavy use periods, Bi-weekly during light use periods)

Routine inspections are conducted on a daily basis and typically can be by the technician responsible for taking care of the school grounds or PE Teacher that is using the facility. When conducting a routine inspection, the playground should first be inspected for any obvious hazards such as:

- Vandalism to equipment
- Broken glass, trash, and animal feces.
- The need for raking surfacing material back under the fall zones of play equipment.
- Sweeping walkways of free of debris and loose surfacing that might create a slippery condition.

If any of the above items are found they should be cleaned up, removed or reported immediately before playground is put in use.

Periodic inspections shall be done weekly during heavy use periods and bi-weekly or

monthly during light use periods. Periodic inspections are more in depth and will require more time than a routine inspection. The following items shall be inspected on each playground and set of bleachers at the facility:

- Any vandalism noted in the area. (Broken equipment, glass, trash, etc.)
- Inspect all equipment for exposed screws or bolts, protruding end bolts, and loose or missing hardware.
- Inspect all equipment for rust, chipping paint, sharp edges, splinters or rough surfaces, and excessive wear.
- Inspect all equipment to ensure no components are missing.
- Inspect all structures to ensure it has not shifted or bent.
- Inspect all swing and chain climbers for any kinks, twists, open “S” hooks, or broken links.
- Inspect platforms and stairway guardrails to determine if they are secure.
- Inspect all swing seats for missing components, cracks, or cuts.
- Inspect the surfacing material for adequate depth (minimum 12”) and coverage under equipment.
- Inspect playground surface for any tripping hazards such as rocks, roots, and exposed concrete footers.
- Inspect playground borders and landscaping for deterioration.
- Inspect landscaping in and around the playground environment, such as low hanging branches (less than 7’) signs, bushes or trees that may cause eye injuries or limit the vision of users, supervisors.
- Inspect physical barriers such as fencing for damage.

Any component determined to be unsafe or other identified safety concern must be corrected as soon as possible. If for some reason the problem cannot be corrected immediately, then whatever measures necessary should be taken to render the equipment safe or unusable until other measures can be taken. Do not fix with inferior or temporary parts/devices. Use only approved hardware or parts for that particular piece of equipment. Immediately upon notice of a problem or safety concern with any playground area or bleachers:

1. Remove broken piece of equipment if possible. Rope or fence off structure. Have a technician stand guard over equipment or area until proper person is notified.
2. Report Hazardous conditions to the principal and director of maintenance.
3. Create a work order and report hazardous conditions to arrange for repair/ removal of equipment.
4. Maintain watch, barrier, signage until equipment is removed or repaired and deemed safe again.

6 - INTEGRATED PEST MANAGEMENT

Four Points of IPM:

1. Prevention of pest population.
2. Application of pesticides only as needed.
3. Selecting the least hazardous pesticides effective for control of targeted pests.
4. Precision targeting of pesticides to areas not contacted or accessible to the children, faculty or staff.

What is IPM?

Integrated pest management (IPM) is a decision-making process following a set of detailed procedures describing how particular pest problems will be avoided or managed. Such pest management tactics may involve the activities of all users of a school facility- teachers, students, administration, and parents- not just staff responsible for pest management. How a school is used has great bearing on the types of pest problems which may occur. Integrated Pest Management (IPM) maintains a high standard of pest control while reducing reliance on pesticides. IPM is:

1. monitoring pests to detect problems early;
2. acting against pests only when necessary;
3. choosing the most effective control option with the least risk to people and the environment; and
4. applying our growing knowledge about pests to create long-term, low-risk solutions.

Routine pesticide applications, made on a regular calendar-based schedule, are not part of IPM. Allowing pests to flourish, increasing health risks to building occupants and others, is also not part of IPM.

IPM Policy

Pest management practices will be based on the following principles:

- Whenever possible, prevention of pests will be the primary strategy to hinder their establishment and reduce the need for pesticide use.
- Knowledge of the pest's identity, biology and life cycle will establish the basis for selection of appropriate management strategies.
- Monitoring of pest numbers and record-keeping will be used to identify pests and sites requiring management action.
- Management strategies will be selected after consideration of the full variety of available options. Strategies will include all practical structural, nonchemical and biological management measures. Chemical measures will be utilized only as a last resort, when other methods fail.
- When necessary, monitoring results will be used objectively to determine action thresholds (the defined level of unacceptable numbers of a particular pest) at which least toxic controls will be employed.
- Educational activities will be conducted to enhance the cooperation and understanding among staff, students and the public.

About KEY PESTS

A key pest is one that is usually encountered at unacceptable levels at least once each school year. Geographic region and climate; surrounding landscape features; and type of construction, age and condition of school buildings influence which pests become key pests for your school. Typical key pests in and around school buildings include ants, birds, cockroaches, head lice, yellow jackets and rodents. Typical pests on grounds are weeds and crabgrass. Routine or regularly scheduled pesticide applications can mask key pests, which may not become apparent for some time after routine pesticide applications have been stopped. For key pests, it makes sense to plan ahead and determine which inspection and monitoring procedures will be used to detect problems early, and how many pests or how much pest damage can be tolerated before action must be taken. Levels of weed tolerance and standards for turf maintenance are included in the IPM plan.

Key pests include:

- **Ants**
- **Flies**
- **Mice**
- **Bees, wasps and yellow jackets**
- **Cockroaches (prevention only)**
- **Head lice**
- **Weeds, crabgrass**

IPM Planning & Communication

1. Compliance with regulations: The District Building Maintenance Manager and the Principal understand and ensure that school meets all Federal, State and local legal requirements related to pest management in schools (e.g., posting, notification, pesticide management, etc.)

2. IPM Plan: A written IPM policy is adopted stating a commitment to IPM implementation and identifying overall objectives relating to pest and pesticide risk management. The policy is used to guide decision-making, and is reviewed at least once every three years and revised as needed.

3. IPM Committee: An IPM Committee is formed to maintain the IPM policy, provide guidance in interpreting the policy, and provide oversight of the IPM program. The IPM Committee shall meet at least 3 times a year.

4. IPM Coordinator: The District Building and Grounds Director will have primary responsibility for coordination of IPM. The Head Custodian will be the IPM Coordinator for the school and is designated to provide day-to-day oversight of IPM implementation. IPM coordinators are aware of and understand Federal, State and Local laws and regulations pertaining to pest management in school buildings.

5. Pest management roles are developed for and communicated to administrators, teachers, custodians, food handlers, students, parents and outside contractors (e.g., pest control operators, food suppliers).

6. Schedule of inspection and monitoring: The written IPM Plan includes a schedule for comprehensive inspection and monitoring of buildings and adjacent grounds; schedule for areas requiring more frequent inspection/ monitoring (e.g., food storage,

preparation and serving areas); and a list of key pests and action thresholds for each key pest.

7. Posting: At least 24 hours prior to pesticide application, postings are placed in the main office detailing locations to be treated and contact information for further information. Copies of the pesticide label and MSDS sheet for the material(s) to be used are included in the posting and maintained on file. This notice remains posted for at least 48 hours after the application.

8. Record-keeping: Complete records of each pesticide application, including product name, quantity used, date and time of application, location, application method and target pest are maintained by the district and the PCO for at least three years.

9. Public access is provided to all information about the IPM policy, IPM plan and implementation. The IPM plan and MSDS are available in the main office for review by interested persons.

10. PCO Contracts: If outside contractors are used to provide pest control services, a written contract is signed identifying specific IPM practices to be used, including regular inspections, monitoring where appropriate, record-keeping and agreement to abide by the IPM Policy and IPM Plan, including use of only Reduced-Risk or Least-Risk Options.

· contract proposals are not evaluated on the basis of low bid only, but are also valued on the basis of the contractor's experience and performance history with an IPM approach, ability to conduct preventative inspections and demonstrated practice of using chemical controls as a last resort.

11. A Pest Sightings Report Log Book is maintained in the kitchen. Staff and students are instructed to report all pest-related incidents to the custodian including date, time and exact location of the sighting, a description of the pest or pest damage, and the name of the person reporting the incident. Staff and students are encouraged to use zip lock bags to collect and identify specimens. The log is used to direct pest management activities, and the custodian or PCO service representative record responses taken to each report. Pest management roles communicated at least annually to all turf and landscape maintenance personnel include prompt reporting of pest sightings, pest damage or conditions favoring pests to the pest manager.

12. Inspection records: Records are maintained of inspection results, pest management actions and evaluations of results.

13. Notification

· If anyone requests, the school maintains a registry of chemically sensitive students, staff and others requesting special consideration in the event of a pesticide application. School provides direct notification to those individuals at least 24 hours in advance of any pesticide application.

14. Registry: School maintains a registry of individuals who have requested notification of pesticide use. School provides direct notification to those individuals at least 24 hours in advance of the application of any pesticide not on the Reduced-Risk or Least-Risk Pest Control Option List (toxicity level IV or higher).

15. Training: Key staff, including new staff, are provided with initial training IPM and with informational updates as needed.

16. Prevention strategies- building:

- The IPM Plan includes a list of actions to prevent and avoid key pest problems (e.g., building repair, waste handling equipment upgrades) and a timeline for implementation.
- The IPM plan specifies policies for building maintenance, new or renovated building design that build in preventative and avoidance strategies for pests.

16. A complete **inventory of all existing lawn maintenance equipment** is maintained, as well as a list of desired equipment for reduced risk pest control options (e.g., aerator, de-thatcher, spring-tooth harrow, flotation tires, etc.).

Desired equipment is worked into the budget.

17. Prevention strategies- grounds:

- The IPM Plan includes a list of actions to prevent and avoid key pest problems (e.g., replacement of problem plants, moving problem plants to more favorable locations, slope modification, pavement replacement and repair) and a timeline for implementation.
- The IPM plan specifies policies for grounds maintenance, new or renovated landscape design that build in preventative and avoidance strategies for pests such as avoiding pest-prone plants, proper placement, etc.

18. Newsletter: An informational bulletin or newsletter will be distributed at least two times per year to inform staff, students, parents and others as appropriate about key IPM issues such as pest management roles, reporting, sanitation, etc.

19. Inclusion/ education of students: Teachers incorporate school building IPM into curricula and/or class projects. We will also explore doing an enrichment program on IPM and environmental issues to be showcased in an April environmental health fair or similar event.

IPM Administration, Inspection, Sanitation & Exclusion

1. **Inspection:** A comprehensive inspection of all buildings is conducted by Head Custodian and District Building and Grounds Director at least annually or defects including cracks, crevices and other pest entryways; food, moisture and shelter resources available to pests; moisture, pest or other damage to structural elements; termite earthen tunnels, pest fecal matter or other signs of pest activity; etc. A report of all defects is prepared, corrective actions are identified and a timeline is established for completion.

2. **IPM inspection checklist** is used for periodic inspections, listing each building feature (e.g., foundation, eaves, etc.) and room to be inspected, including specific locations within features or rooms (e.g., vents, storage closets) to be included in the inspection, and specific conditions to be noted (e.g., repair, cleaning needs). Attached checklist developed by MN Dept. of Agriculture will be utilized.

3. **Food policies for areas other than kitchen and cafeteria:** Food and beverages are allowed only in designated areas.

- **Snacks/food items in all classrooms kept in sealed plastic containers.**
- **Food in teacher’s lounge kept in refrigerator or sealed containers.**
- **Students instructed not to leave food in lockers or desks overnight.**
- Pest management roles communicated to staff and students include removing food or food wrappers from lockers and desks on a daily basis.
- Lockers and desks are emptied and thoroughly cleaned at least once a year.

· **Posters of food policies will be displayed throughout the school.**

4. Cleaning of floors and carpets:

- Floors are cleaned and carpets vacuumed daily in areas where food is served, and at least weekly in other areas.
- Furniture in classrooms and offices that are rarely moved (e.g., staff desks, bookcases, filing cabinets) receive a thorough cleaning around and under to remove accumulated lint, etc., at least annually.

5. Food storage: Inspection aisles are maintained around stored products.

Stored products are not permitted direct contact with walls or floors, allowing access for inspection and reducing pest harborages. Metal mesh shelving in food storage areas is sufficient.

6. Food rotation: Stored products are rotated on a “first in, first out” basis to reduce potential for pest harborage and reproduction.

7. Storage of food products in non-food areas: Food products and other potential pest food items (e.g., plant seeds, pet food and bedding, decorative corn, gourds) are refrigerated or stored in glass, metal or plastic containers with pest-proof lids. Food items used as crafts materials (e.g. seeds) are stored in pest-proof plastic containers.

8. Recycling is placed in plastic bags, sealed with twist ties and disposed of on a daily basis.

9. Cleaning in food areas:

- Food-contaminated dishes, utensils and surfaces are cleaned by the end of each day; sponges, mops and mop buckets are properly dried and stored (e.g., mops are hung upside down, buckets are emptied).
- Surfaces in food preparation and serving areas are regularly cleaned of any grease deposits. Appliances and furnishings in these areas that are rarely moved (e.g., refrigerators, freezers, shelve units) receive a thorough cleaning around and under to remove accumulated grease, dust, etc., at least monthly.
- Food waste from preparation and serving areas, and waste with food residues (e.g., milk cartons, juice boxes) is drained of excess moisture before discarding and stored in sealed plastic bags before removal from school grounds.

10. Trash/recycling rooms and dumpsters:

- are regularly inspected and spills cleaned up promptly; indoor garbage is kept in lined, covered containers and emptied daily. All garbage cans and dumpsters are cleaned regularly.
- Trash cans are double bagged or single bagged and cleaned on a regular basis.
- Outdoor garbage containers and storage are placed away from building entrances. Stored waste is collected and moved off site at least weekly.

11. Food delivery: To the extent possible, food products not delivered in pestproof containers (e.g., paper, cardboard boxes) are stored refrigerated or transferred to pest-proof containers upon delivery.

12. Quarantine: Incoming shipments of food products, paper supplies, etc. are inspected for pests and rejected if infested. Staff who handle incoming food boxes are instructed to put an infested box in a sealed plastic bag, so pests do not escape, and to place it in the dumpster immediately.

13. Cardboard reduction: Storage of food, paper products and other kitchen items in cardboard boxes is reduced.

14. **Vending machines** are cleaned regularly.
15. **Waste materials in all rooms** within the school building are collected and removed to a dumpster or compactor daily.
16. **Packing/shipping trash** (bags, boxes, pallets) is promptly and properly disposed of or recycled.
17. **Exterior doors** throughout the building are kept shut when not in use.
18. **Head lice:** Students are advised not to exchange hats, combs or hairbrushes. If head lice are reported, the School Nurse distributes educational materials which describe cleaning methods, how to prevent spread and non-toxic treatment with *Dippity-do* or mayonnaise and combing. School will also try the “zapper” comb and the new enzyme products (*Lice Be Gone, Nature’s Best*) to see how effective they are. If nurse identifies resource issues with families of students with chronic head lice problems, we will establish a small emergency fund to help these families afford the laundromat and the treatment products.
19. **Animal wastes from classroom pets or laboratory animals** are flushed or placed in sealed containers before disposal.
20. **Floor and sink drain traps** are kept full of water. In food service areas, drain covers are removed and drains are cleaned weekly with a long-handled brush and cleaning solution. In other areas, such as drains under refrigeration units, drains are cleaned monthly.
21. **Window screens:** Windows and vents are screened or filtered. School policy requires use of screens, when windows are opened.
22. **Vent and duct cleaning:** The inside of vents and ducts are cleaned annually. Vent or heater filters are cleaned or replaced at least annually.
23. **Vegetation near structure:**
 - vegetation, shrubs and wood mulch are kept at least one foot away from structures.
 - Tree or shrub limbs and branches are maintained at least 6’ away from structures.
24. **Building eaves, walls and roofs are inspected** frequently during nesting season for bird and other nests, and these are removed.
25. **Weather stripping and door sweeps** are placed on all doors to exclude pest entry.
26. **Moisture sources** are corrected (e.g., areas where condensation forms frequently are ventilated, plumbing and roof leaks fixed, dripping air conditioners repaired). Floor drains are screened and sewer lines are in good repair.
27. **Cracks and crevices** in walls, floors and pavement are corrected.
28. **Openings around potential insect and rodent runways** (electrical conduits, heating ducts, plumbing pipes) are sealed.
29. **New purchases:**
 - Purchases of new kitchen appliances and fixtures are of pest-resistant design (i.e., open design, few or no hiding places for roaches, freestanding and on casters to ease thorough cleaning).
 - Purchases of new office and classroom furniture that is rarely moved (e.g., staff desks, bookcases, filing cabinets) are of a design that permits complete cleaning under and around the furniture, or ready movement for cleaning purposes.

Building Pest & Pesticide Risk Management

1. **Pesticide applicators:** All pesticide applications are made by a person licensed and/or certified by the state to apply pesticides in commercial facilities, except that an unlicensed custodian is authorized to apply wasp and hornet and ant treatments in emergency situations. Licensed persons include district and PCO staff.
2. **Pesticide applications** are made only after detection of a verifiable pest problem and accurate identification of the pest. Applications are not made on a routine or regularly scheduled basis (e.g., weekly, monthly applications are not made).
3. **Pest contamination:** Food that has come in direct contact with pests (e.g., ants, cockroaches, mice) is considered contaminated and is disposed of.
4. **Baits:** Chemical baits, if used (e.g., for ants, cockroaches, rodents), are placed in a locked, distinctively marked, tamper-resistant container designed specifically for holding baits and constructed of metal, plastic or wood. Bait containers are securely attached to floors, walls, etc. such that the container cannot be picked up and moved. Baits must always be placed in the baffle protected feeding chamber of the container and not in the runway. Parafinized or weatherproof baits are used in wet areas. All bait use is in areas inaccessible or off-limits to children. Baits are not used outdoors unless bait containers are inaccessible to children (e.g., placed underground in pest nests or on building roofs).
5. **Mapping of baits and traps:** If baits or traps of any kind are used, a map or floor plan of each area where baits or traps are located is prepared, numbering each bait station or trap, and entering the location of each numbered bait station or trap on the map. Bait stations or traps are marked with appropriate warning language.
6. If **dust formulations** are used, these are applied only to areas that can be sealed (e.g., wall voids) to prevent exposure of students to airborne dust particles.
7. **Reduced-Risk or Least-Risk Options are the only pest controls used.** No pesticide applications are made for pests that cause aesthetic damage only.
8. **Storage of pesticides on school grounds:** No pesticides are stored on school grounds, except for wasp and hornet and ant treatments.

IPM for Grounds: Inspection & Pest & Pesticide Risk Management

1. **IPM Plan:** A written IPM Plan is prepared that includes a schedule for comprehensive inspection and monitoring of school grounds; schedule for areas requiring more frequent inspection/monitoring (e.g., athletic fields); and a list of key pests and action thresholds for each key pest.
2. **Turf and landscape maintenance:** The IPM plan divides turf and landscape areas by basic level of use (i.e., athletic fields vs. lawns, highly visible landscape areas vs. less visible areas). Monitoring schedules and action thresholds are appropriate to each level. Turf will be maintained at levels I (high maintenance) to IV (low maintenance), according to use patterns and visibility, as specified in the Turf Maintenance chart.
3. **Inspection:** A comprehensive inspection of all school grounds is conducted by the district ground supervisor and head custodian at least annually to monitor turf quality, health of landscape plants, and other potential problems.
4. **Pesticide applicators:** All pesticide applications are made by a person licensed and/or certified by the state to apply pesticides in commercial settings. This includes contracted PCO or district grounds staff. Unlicensed custodial staff may use wasp and hornet treatment in emergency situations only.

5. **Pesticide applications** are made only after detection of a verifiable pest problem and accurate identification of the pest. Applications are not made on a routine or regularly scheduled basis (e.g., weekly, monthly applications).
6. All **pesticide application equipment** is calibrated at the start of each growing season. Calibration records are dated and maintained with spray records. All pesticide application equipment is re-calibrated at mid-season.
7. **Pesticide and fertilizers are loaded** into application equipment over a hard surface where spills can be promptly and thoroughly cleaned up, without danger of spill runoff or leaching into soil.
8. **Baits:** Chemical baits, if used (e.g., for voles, moles, etc.), are placed in a locked, distinctively marked, tamper-resistant container designed specifically for holding baits and constructed of metal, plastic or wood. Bait containers are securely attached to immovable objects such that the container cannot be picked up and moved. Baits must always be placed in the baffle-protected feeding chamber of the container and not in the runway. Parafinized or weatherproof baits are used in wet areas. All bait use is in areas inaccessible or off-limits to children (e.g., placed underground in pest nests or on building roofs).
9. **Mapping of baits and traps:** If baits or traps of any kind are used, a map of each area where baits or traps are located is prepared, numbering each bait station or trap, and entering the location of each numbered station or trap on the map. Bait stations or traps are marked with appropriate warning language.
10. **Spot pesticide applications** limited to affected areas, plants or plant parts are made in place of an entire management unit, group of plants or entire plant, respectively (e.g., one corner of a lawn is treated for grubs instead of treating the entire lawn, or one shrub or portion of a shrub is treated instead of treating all like-shrubs or the entire shrub).
11. When **effective control can be achieved at reduced rates**, pesticide applications are made at less of the full-labeled rate.
12. **Use of colorant:** Where appropriate (e.g., herbicide applications), a colorant is used to mark the treated area. (Optional).
13. **Reduced-Risk or Least-Risk Options** are the only controls used.
14. **Landscape plants:**
 - Pest Manager can correctly identify the landscape plants present on school grounds.
 - Landscape plants are scouted at least monthly during the growing season for conditions requiring action, including damaged, diseased or dead limbs; soil erosion and compaction; and insect, disease and weed pests and damage. A regular pattern is used to ensure that all plantings are scouted. Scouting results are noted in writing and these records are maintained for at least three years.
15. **Soil testing:** Soil in landscape plantings is tested at least every five years for nitrogen, phosphorus, potassium and pH. Fertilizers and other soil amendments are applied according to soil and/or plant foliage test results, not on a routine or regularly scheduled basis.
16. **Soil compaction is monitored** regularly and problem areas corrected.
17. **Irrigation** of established plants is scheduled according to soil moisture and anticipated weather, and not on a routine or regularly scheduled basis.
18. **Renovation:**

- When renovating, adding new plants or establishing new landscape areas, plant species are selected to address site-specific growing conditions (e.g., tolerance to key pests, pH levels, soil type, light levels, hardiness zone, annual rainfall, etc.). Plant spacing is adequate to ensure adequate light, nutrients and water.
- When renovating, changes in grade or drainage around established trees is avoided.
- Key plants in the landscape are removed and replaced with plants less susceptible to pest problems.
- Native species are used, when possible.

19. **Mulching:** Trees, shrubs and perennial beds are mulched to conserve soil moisture, improve organic matter, reduce compaction and moderate soil temperature.

7 - PREVENTIVE MAINTENANCE

The focus of the district's maintenance program shall be on preventive maintenance. Every part of the facility shall be inspected according to the following schedules. Mechanical equipment shall be serviced according to the instructions from the manufacturer. Filters shall be changed and equipment shall be adjusted and lubricated according to the appropriate operations and maintenance instructions.

Servicing and adjustments shall be done during inspections unless parts need to be ordered. In the event parts are to be ordered, the person conducting the preventive maintenance inspection shall complete and submit a work order for parts and any necessary work that was not completed at the time of the inspection.

Deferred maintenance shall be avoided unless time, facility use, or funding prevents immediate completion of necessary maintenance or repairs. All deferred work orders shall be reviewed monthly and completed at the earliest possible time. Every effort will be made to eliminate all remaining deferred maintenance work orders during the summer months so that no deferred maintenance will remain at the beginning of every school year.

Every six months the Maintenance Supervisor shall review the work order log for the previous 24 months to identify trends and equipment that fails or requires adjustment more frequently than the manufacturer's recommended maintenance schedule or more frequently than other equipment of the same type. Special attention will be given to equipment under warranty.

Equipment identified as requiring an unexpected level of attention will be considered for replacement at the earliest opportunity. If appropriate, technical assistance shall be requested from the manufacturer.

Every two weeks. Inspect the following items. Adjust as appropriate. Repair immediately or complete work order for future repairs.

Automatic Doors

All automatic doors will be inspected biweekly. These include automatic vehicular gates, doors with ADA controls, and overhead doors in delivery areas and shops. Routine maintenance is the best method to ensure operational integrity.

- _____ *Nut, bolt, and fastener conditions*
- _____ *Operating devices (motors), pneumatic powering*
 - _____ *Cleanliness*
 - _____ *Lubrication*
 - _____ *Stability*
 - _____ *Structural integrity*
 - _____ *Shaft conditions*
 - _____ *Bearing conditions*
 - _____ *Overload and other relay conditions*
 - _____ *Circuit breaker conditions*
 - _____ *Overall appearance for damage or vandalism*
- _____ *Overall operation*
- _____ *Weatherproofing/caulking condition*
- _____ *Lubrication of guides, hinges, and locks*
- _____ *Roller alignment*
- _____ *Glazing integrity*
- _____ *Hinge conditions*
- _____ *Lock conditions and security*
- _____ *Alignment*
 - _____ *Plumb*

_____ *Building settlement*

_____ *Straightness of guides*

_____ *Overall condition for deficiencies such as water intrusion and corrosion*

Lighting: Exterior and Interior

All lighting systems will be inspected biweekly. Extreme care must be taken to identify and correct deficiencies.

This checklist will be applied to the following lighting systems:

- Building exterior
- Pedestrian
- Parking area
- Field and sports areas
- Building interior (classrooms, common areas, offices, hallways, exits, etc.)
- Emergency

Various fixture and lamp types are used according to area needs, including fluorescent, incandescent, high intensity discharge (HID), mercury vapor, metal halide and arcs, or high pressure sodium (HPS). It is important to fully wash, rather than dry-wipe, exterior surfaces to reclaim light and prevent further deterioration. Illumination will be maintained according to the Illuminating Engineering Society's recommended levels.

_____ *Cleanliness*

_____ *Voltage consistency*

_____ *Glassware conditions*

_____ *Diffusing louver conditions*

_____ *Counter reflector conditions*

_____ *Fixture support conditions*

_____ *Stanchion conditions*

_____ *Luminary conditions*

_____ *Wire conditions*

_____ *Ballast conditions*

_____ *Timers/sensors function (make seasonal adjustments)*

_____ *Junction box and cover conditions*

_____ *Switch conditions*

_____ *Outlet and cord conditions (if applicable)*

_____ *Protective caging conditions (if applicable)*

_____ *Overall condition for deficiencies such as arcing, wire exposure, unauthorized connections, and moisture problems*

Security Systems

Biweekly preventive maintenance of security systems is critical for occupant safety.

_____ *Pagers*

_____ *Charge*

_____ *Battery efficiency*

_____ *Function*

_____ *Possession by authorized users*

_____ *Battery Chargers*

_____ *Overall condition*

_____ *Spare Batteries*

_____ *Portable Radios*

_____ *Charge*

_____ *Battery efficiency*

_____ *Function*

_____ *Possession by authorized users*

_____ *Battery Chargers*

_____ *Overall condition*

_____ *Spare Batteries*

_____ *Metal detectors*

_____ *Function*

_____ *Service schedule by appropriate servicing agent for timeliness*

_____ *Power source stability and continuity*

_____ *Overall condition*

_____ *Surveillance cameras and monitors*

_____ *Function*

_____ *Fixture integrity*

_____ *Mounting condition/stability*

_____ *Location accuracy*

_____ *General console condition*

_____ *Power source continuity*

_____ *Overall condition*

_____ *Function*

Monthly. Inspect the following items. Adjust as appropriate. Repair immediately or complete work order for future repairs.

Alarm Systems

The following checklist covers automated smoke and burglar alarm systems throughout the school. Preventive maintenance consists of validating that all equipment is present and functional on a monthly basis. Only certified professionals shall make repairs or adjustments to alarm systems. Maintenance staff will accompany professionals during statutory inspections.

Smoke detectors:

Operation

Procedure: Use UL-approved smoke alarm tester in aerosol can. One spray will activate both photo electric and ionization detectors.

Battery efficiency

Hard wire connections

Housing condition

Overall condition

Intruder alarm system:

Note: Many systems are self-tested on a daily basis. Manufacturer's instructions should be followed at all times.

Fire Suppression System Testing

The fire sprinkler system shall comply with the requirements of the National Fire Protection Association (NFPA) *Fire Protection Handbook* (NFPA 72, *National Fire Alarm Code*).

Preventive maintenance in this area consists of validating that all equipment is present and functional on a monthly basis. Only certified professionals should make repairs or adjustments to sprinkler systems. Maintenance personnel must be familiar with the testing procedures.

Fire department connection

Inlet cap conditions

- _____ *Couplet conditions*
- _____ *Gasket conditions*
- _____ *Clipper valve conditions*
- _____ ***Control valve conditions***
- _____ ***Riser conditions***
- _____ ***Gauge conditions***
 - _____ *System pressure*
 - _____ *Supply pressure*
- _____ ***Sprinkler conditions and performance***
- _____ ***Gravity condition and function***
- _____ ***Suction tank condition and function***
- _____ ***Reservoir supply***
- _____ ***Pressure tank supply***
- _____ ***Overall condition for signs of obstructions***

Doors and Windows

Inspect all doors and windows for general condition and operability. Adjust and repair as necessary.

- _____ ***Windows***
 - _____ *Pane conditions*
 - _____ *Screen conditions*
 - _____ *Storm window conditions*
 - _____ *Lock operation*
 - _____ *Frame alignment and conditions*

_____ *Security*

_____ *Weather sealing condition*

_____ *Paint or surface conditions*

_____ *Blind function and conditions*

_____ *Hardware conditions and lubrication*

_____ *Overall condition*

_____ ***Doors and hardware***

_____ *Automatic closure operation. Must open with no more than 5 pounds of force pulling or pushing.*

_____ *Lock operation*

_____ *Hardware conditions and lubrication*

_____ *Weather sealing condition*

_____ *Paint or surface conditions*

_____ *Frame alignment and conditions*

_____ *Door stop placement and stability*

_____ *Alarm system operation*

_____ *Overall condition*

Gas Connections

The following check shall be performed monthly for all gas connections and main valves throughout the facility. The gas company should be contacted if:

- There is an odor of gas anywhere at any time, or
- Valves cannot be turned off or appear to be rusted or damaged, or
- For minor repairs if maintenance personnel do not have adequate training or tools.

When gas is detected by odor, building occupants should immediately evacuate, and the gas company and fire department should be contacted.

_____ ***Possible undetected leakage: Visually check – Do not open and close valves***

_____ *Operation*

Procedure: Perform a bubble test with soap and water, or use a handheld combustible gas detector (of professional quality).

Restrooms

The following checklist shall be applied monthly to all restrooms within the school facility.

_____ ***Fire safety***

_____ *Electrical outlet load*

_____ *Positioning of paper/flammable materials away from heat sources*

_____ *Accessible route*

_____ *Visible exit*

_____ ***ADA accessibility***

_____ *Accessible toilet stalls with wheelchair turning radius*

_____ *Accessible sinks*

_____ *Accessible mirror*

_____ *Hand rail stability and condition*

_____ *Special features function such as “help” mechanisms and automated systems*

_____ *Overall condition*

_____ ***Plumbing***

_____ *Inspect all component conditions for deficiencies such as leakage, corrosion, and failure potential*

_____ ***Sinks and hardware***

_____ *Faucet function and hardware conditions*

_____ *Drain function*

_____ *Water flow/pressure*

_____ *Overall condition*

_____ ***Urinals***

_____ *Water flow/pressure*

_____ *Cap and part conditions*

_____ *Overall condition*

_____ ***Toilets***

_____ *Water flow/pressure*

_____ *Cap and part conditions*

_____ *Seat support conditions*

_____ *Overall condition*

_____ ***Dispenser operation and conditions (soap, paper towels, etc.)***

_____ ***Partitions***

_____ *Stability*

_____ *Surface conditions for deficiencies such as sharp or worn areas or vandalism*

_____ *Part conditions*

_____ *Security*

_____ *Overall condition*

_____ ***Trash receptacles***

_____ *Sanitation conditions*

_____ *Stability*

_____ *Overall condition*

_____ ***Mirrors***

_____ *Cleanliness*

_____ *Overall condition for deficiencies such as cracks, sharp edges, or vandalism*

_____ ***Overall cleanliness***

_____ ***Overall privacy***

_____ ***Overall appearance for damage and vandalism such as graffiti***

_____ ***Fire extinguishers (See also annual inspection of Fire Extinguishers)***

_____ *Tag currency*

_____ *Placement in correct proximity to potential hazards per code*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

Offices

Check the following once per month.

_____ ***Fire safety***

_____ *Electrical outlet load*

_____ *Positioning of paper/flammable materials away from heat sources*

_____ *Accessible route*

_____ *Visible exit*

_____ ***Emergency control panels***

_____ *Operation*

_____ *Part conditions*

_____ *Overall condition*

_____ ***Floor condition for deficiencies such as excessive wear, tears, stains, and tripping hazards***

_____ ***Walls/ceiling condition***

_____ ***Furniture: desks, chairs, tables, and shelves***

_____ *Stability*

_____ *Surface conditions for deficiencies such as sharp or rough edges or protruding hardware*

_____ *Lubrication of hardware*

_____ *Overall condition*

_____ ***File cabinets***

_____ *Stability*

_____ *Lock function*

_____ *Overall condition*

_____ ***Stationary partitions***

_____ *Stability*

_____ *Surface conditions for deficiencies such as sharp or worn areas and vandalism*

_____ *Overall condition*

_____ ***PA system***

_____ *Operation*

_____ *Overall condition*

_____ ***Alarm system for student records (if applicable)***

_____ *Operation*

_____ *Power source stability and continuity*

_____ *Overall condition*

_____ ***Fire extinguishers (See also annual inspection of Fire Extinguishers)***

_____ *Charge*

_____ *Tag currency*

_____ *Placement in correct proximity to potential hazards per code*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

Kitchen and Dining Areas

School kitchens and dining areas contain many pieces of equipment that can jeopardize life safety if preventive maintenance is neglected. The following monthly checklist includes common cooking equipment and dining furniture. Preventive maintenance for general features including **Lighting, Alarm Systems, Fire Extinguishers, Doors and Windows, and HVAC Systems** also applies to this area. Refer to the corresponding checklists.

_____ ***Fire safety***

_____ *Electrical outlet load*

_____ *Positioning of paper/flammable materials away from heat sources*

_____ *Accessible route*

_____ *Emergency exit visibility*

_____ ***Equipment***

Note: When checking kitchen equipment, first consult operating or area personnel for any deficiencies. For each item, check overall condition, switches, timers, piping and valves for leaks, wiring, pilots, doors, gaskets, and belts, where applicable. Always follow manufacturers' guidelines.

_____ *Beverage dispenser*

_____ *Broiler*

_____ *Cooker*

_____ *Dishwasher*

_____ *Drink cooler*

_____ *Food slicer or chopper*

_____ *Freezer*

_____ *Fryer*

_____ *Garbage disposal*

_____ *Grill*

_____ *Ice machine*

_____ *Mixer*

_____ *Oven*

_____ *Refrigerator*

_____ *Steamer*

_____ *Toaster*

_____ ***Gas connections (See Gas Connections checklist)***

_____ ***Floor condition for deficiencies such as excessive wear, stains, and tripping hazards***

_____ ***Exhaust system***

_____ *Hood function and condition*

_____ *Grease trap function and condition*

_____ *Filter condition*

_____ *Exhaust duct condition*

_____ *Fan function and condition*

_____ *Supply duct condition (if applicable)*

_____ *Furniture: counters, tables, benches, and chairs*

_____ *Stability*

_____ *Surface condition for deficiencies such as rough areas or protruding hardware*

_____ *Overall condition*

_____ *Fire extinguishers (See also annual inspection of Fire Extinguishers)*

_____ *Charge*

_____ *Tag currency*

_____ *Placement in correct proximity to potential hazards per code*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

Classrooms

Classrooms comprise the bulk of the rooms in a school facility. While their usage can vary and require special equipment, such as in laboratory or shop classrooms, their basic components are similar. Classrooms have, in recent years, grown to accommodate audiovisual, computer, and collaborative learning equipment. Many classrooms have moveable partitions to allow the room to be more functional. All of these elements create a need for more intensive maintenance and greater diligence during the monthly PM process.

Classrooms with special uses may have additional equipment that needs to be inspected and maintained. Examples include laboratory, art, wood and automotive shop, and culinary classrooms. Career-technical centers will have additional space and equipment requirements. Maintenance personnel should clarify preventive maintenance duties with instructors and administrators. Some equipment procedures may include a check of gas valve security, ventilation systems, and special storage areas in laboratories. Art classrooms may require inspections of kilns, pottery wheels, and easels, for example. Staff should check with administration regarding off-hours use of these areas and equipment, which may limit their availability for maintenance procedures. PM for **Gas Connections, Lighting, Alarm Systems, Fire Extinguishers, Doors and Windows, and HVAC Systems** also applies to classroom areas. Refer to the corresponding checklists.

_____ **Fire safety**

_____ *Electrical outlet load*

_____ *Positioning of paper/flammable materials away from heat sources*

_____ *Accessible route*

_____ *Emergency exit visibility*

_____ **Furniture: desks, chairs, tables, and shelves**

_____ *Surface conditions for deficiencies such as excess wear, rough areas, or protruding hardware*

_____ *Part conditions*

_____ *Cleanliness*

_____ *Stability*

_____ *Overall condition*

_____ **Blackboard/marker board**

_____ *Mounting condition/stability*

_____ *Overall appearance*

_____ *Cleaning capability*

_____ *Overall condition*

_____ **Audio/visual equipment**

_____ *Overhead equipment condition and stability*

_____ *Housing condition*

_____ *Electrical service condition*

_____ *Part conditions*

_____ *Screen operation and condition*

_____ *Speaker system operation*

_____ *Electrical cord and outlet conditions*

_____ *Overall condition*

_____ ***Computer system/Work stations***

_____ *Electrical integrity/surge protector conditions*

_____ *Equipment condition*

_____ *Cleanliness*

_____ *Overall operation*

_____ *Work station and member parts function*

_____ *Overall condition*

_____ ***Partitions***

_____ *Lubrication*

_____ *Stability*

_____ *Overall condition for deficiencies such as excessive wear, vandalism, improper function, or broken/missing parts*

_____ ***Flooring***

_____ *Surface condition for deficiencies such as excessive wear, stains, tears, and tripping hazards*

_____ ***Plumbing systems (if applicable)***

_____ *Sink conditions and drainage*

_____ *Overall condition for deficiencies such as leaks, corrosion, or failure potential*

_____ ***Timer function (if applicable)***

_____ ***Trash receptacles***

_____ *Location*

_____ *Cleanliness*

_____ *Overall condition*

_____ ***Inter-class speaker system operation***

_____ ***Clock function***

_____ ***Closets/storage areas***

_____ *Door/lock operation*

_____ *Appearance, interior and exterior*

_____ *Overall condition for debris and safety hazards*

_____ ***Wall map function and general condition***

_____ ***Panic button/security operation***

_____ ***Fire extinguishers (See also annual inspection of Fire Extinguishers)***

_____ *Tag currency*

_____ *Placement in correct proximity to potential hazards per code*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

Library

K-12 schools employ a library/media center as a central information resource for students, faculty, and staff. In addition to books and periodicals, this area may house videotapes, cassettes, CDs, computers, closed circuit TV programming and production areas, cameras, and projection equipment. Monthly attention to its overall maintenance needs is critical. Preventive maintenance for general features including **Lighting, Alarm Systems, Fire Extinguishers, Doors and Windows, and HVAC Systems** also applies to this area. Refer to the corresponding checklists.

_____ ***Fire safety***

_____ *Electrical outlet load*

_____ *Positioning of paper/flammable materials away from heat sources*

_____ *Accessible route*

_____ *Emergency exit visibility*

_____ ***Furniture: tables, chairs, and other seating***

_____ *Surface conditions for deficiencies such as rough areas, excess wear, or protruding hardware*

_____ *Cleanliness*

_____ *Stability*

_____ *Part conditions*

_____ *Overall condition*

_____ ***Shelving***

_____ *Structural alignment*

_____ *Overall appearance*

_____ *Stability*

_____ *Overall condition*

_____ ***Bulletin board***

_____ *Mounting condition/stability*

_____ *General appearance*

_____ *Overall condition*

_____ ***Audio/visual and micro-fiche equipment***

_____ *Housing condition*

_____ *Electrical service condition*

_____ *Part conditions*

_____ *Screen function and condition*

_____ *Speaker system operation*

_____ *Electrical cord and outlet conditions*

_____ *Overall condition*

_____ ***Partitions***

_____ *Lubrication*

_____ *Stability*

_____ *Mechanical function, if operable*

_____ *Overall condition for deficiencies such as excessive wear, vandalism, improper function, or broken/missing parts*

_____ ***Floors***

_____ *Surface integrity*

_____ *Overall condition for deficiencies such as excessive wear, stains, tears, and tripping hazards*

_____ ***Signage (See also Signage checklist)***

_____ *Cleanliness*

_____ *Visibility*

_____ *General appearance*

_____ *Message currency*

_____ *Overall condition*

_____ ***Walls/ceiling***

_____ *Structural integrity*

_____ *Paint condition*

_____ *Plaster/drywall condition*

_____ *Molding condition*

_____ *Overall condition*

_____ ***Inter-class speaker system operation***

_____ ***Clock operation***

_____ ***Closets/storage areas***

_____ *Door/lock operation*

_____ *Appearance, interior and exterior*

_____ *Overall condition for debris and safety hazards*

_____ ***Wall map condition***

_____ ***Turnstiles***

_____ *Lubrication*

_____ *Operation*

_____ *Edge conditions*

_____ *Integrity of member pieces*

_____ *Overall condition*

_____ ***File systems***

_____ *Overall function*

_____ *Lubrication*

_____ *Overall condition*

_____ ***Librarian consoles (including desks, chairs, partitions, and counters)***

_____ *Operation*

_____ *Surface condition for deficiencies such as excessive wear, rough areas, or protruding hardware*

_____ *Part conditions*

_____ *Overall condition*

_____ ***Security system (See also Alarm Systems checklist)***

_____ *Overall operation*

_____ *Speaker/communication system function*

_____ *Hardware conditions*

_____ *Cameras/video operation*

_____ *Panic button operation*

_____ *Alarm operation*

_____ *Light operation and conditions*

_____ *Overall condition*

_____ ***Computer systems, modules***

_____ *Electrical integrity (including surge protectors)*

_____ *Equipment completeness*

_____ *Cleanliness*

_____ *Operation*

_____ *Work station function*

_____ *Overall condition*

_____ ***Fire extinguishers (See also annual inspection of Fire Extinguishers)***

_____ *Charge*

_____ *Tag currency*

_____ *Placement in correct proximity to potential hazards per code*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

Auditorium

Auditoriums are a focal point in school facilities, as they are areas that service a great number of students, faculty, parents, and community members. Auditoriums must comply with ADA accessibility standards, including those for seating, sight lines, fire egress, and listening systems. These areas are often open for access both during school and after hours, often late into the night. With such use comes wear and abuse. Monthly preventive maintenance serves a vital role in promoting and sustaining the life of this important school asset. Preventive maintenance for general features including **Lighting, Alarm Systems, Fire Extinguishers, Doors and Windows, and HVAC Systems** also applies to this area. Refer to the corresponding checklists.

_____ ***Fire safety***

_____ *Electrical outlet load*

_____ *Positioning of flammable materials away from heat sources*

_____ *Accessible route*

_____ *Evacuation plan visibility*

_____ ***Seating***

_____ *Surface conditions for deficiencies such as tears, blemishes, and excessive wear*

_____ *Track alignment*

_____ *Lubrication of chair mechanisms*

_____ *Stability*

_____ *Overall integrity*

_____ *Upholstery condition*

_____ *Passageway clearance and markings*

_____ *Folding arm conditions*

_____ *Floor mounting conditions*

_____ ***Risers***

_____ *Overall condition for tripping hazards*

_____ *Lighting function and conditions*

_____ *Safety tread conditions*

_____ *Overall condition*

_____ ***Message boards/marquees***

_____ *Stability of mountings*

_____ *Overall appearance*

_____ *Lighting condition*

_____ *Cleanliness*

_____ *Glass condition*

_____ *Lettering condition*

_____ *Overall condition*

_____ ***Stage***

_____ *Overall condition for deficiencies such as excessive wear, stains, and tripping hazards*

_____ ***Curtains***

_____ *Cleanliness*

_____ *Alignment*

_____ *Function*

_____ *Pulley, weight, counterweight, and hoist conditions*

_____ *Cable/rope conditions*

_____ *Electrical connection conditions*

_____ *Lubrication*

_____ *General safety conditions*

_____ *Current certifications from authorized agents*

_____ *Overall condition for deficiencies such as tears, tripping hazards, and missing parts*

_____ ***Costume rooms***

_____ *Cleanliness*

_____ *Overall condition for deficiencies such as excessive wear and safety hazards*

_____ ***Floor***

_____ *Surface condition for deficiencies such as excessive wear, stains, and tripping hazards*

_____ ***Area lighting***

_____ *Bulb conditions*

_____ *Switch conditions*

_____ *Guard conditions*

_____ *Fixture conditions and stability*

_____ *Overall condition*

_____ ***Stage lighting***

_____ *Overall operation*

_____ *Cleanliness of lenses*

_____ *Apparatus stability and movement per design*

_____ *Dimmer circuit operation*

- _____ *Light circuit quantities and distribution*
- _____ *Electrical feed conditions*
- _____ *Control console operation*
- _____ *Patch panel operation*
- _____ *Transfer panel operation*
- _____ *Marquee lighting operation*
- _____ *Follow spot operation*
- _____ *Lighting fixtures cleanliness and operation*
- _____ *Connector strip conditions*
- _____ *Box boom conditions*
- _____ *Cove, beam, slot, and truss conditions*
- _____ *Control booth overall condition*
- _____ *Dimmer room overall condition*
- _____ *Boom, ladder, torm, and tormentor locations and conditions*
- _____ *Pipe, batten, and electric locations and operation*
- _____ **Catwalks**
 - _____ *Overall structural stability*
 - _____ *Railing stability*
 - _____ *Walkway stability*
 - _____ *Overall condition for deficiencies such as tripping hazards, impediments, and electrical contact*
- _____ **Staging equipment**
 - _____ *Member integrity*
 - _____ *Wheel conditions*

_____ *Overall function as intended*

_____ *Overall condition*

_____ ***Sound system***

_____ *Operation*

_____ *Part conditions*

_____ *Overall condition*

_____ ***Trash receptacles***

_____ *Location*

_____ *Overall condition*

_____ ***Walls/ceiling***

_____ *Paint condition*

_____ *Plaster/drywall conditions*

_____ *Acoustical material conditions*

_____ *Overall condition*

_____ ***Clock operation***

_____ ***Closets/storage areas***

_____ *Door/lock operation*

_____ *Overall appearance, interior and exterior*

_____ *Overall condition for debris and safety hazards*

_____ ***Lobby/entrance area***

_____ *Accessibility*

_____ *Overall condition*

_____ ***Refreshment stand/area (if applicable)***

_____ *Cleanliness*

_____ *Appliance operation and cleanliness*

_____ *Utility connection conditions (check for gas leaks)*

_____ *Table/chair conditions and stability*

_____ *Roll top door operation*

_____ *Floor conditions*

_____ *Wall and ceiling conditions*

_____ *Grease trap cleanliness*

_____ *Vent cleanliness*

_____ *Overall condition*

_____ ***Signage (See also Signage checklist)***

_____ *Cleanliness*

_____ *Currency of message*

_____ *General appearance*

_____ *Overall condition*

_____ ***Emergency exit visibility and lighting conditions***

_____ ***Fire extinguishers (See also annual checklist for Fire Extinguishers)***

_____ *Charge*

_____ *Tag currency*

_____ *Placement in correct proximity to potential hazards per code (e.g. lighting/curtain areas)*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

Gymnasium

The gymnasium is a multi-venue event center where heavy traffic can have a dramatic impact on the life expectancy of the equipment and area. With such extreme use, monthly preventive maintenance is critical. The Life Safety Code requires an annual inspection of bleachers by the school staff and a biennial inspection by a licensed engineer, architect, or individual certified by the manufacturer. (*Preventive maintenance for general features including **Lighting, Alarms Systems, Fire Extinguishers, Doors and Windows, and HVAC Systems** also applies to this area. Refer to the corresponding checklists. Also see **Locker Room** checklist.*)

_____ **Fire safety**

_____ *Electrical outlet load*

_____ *Positioning of flammable materials away from heat sources*

_____ *Accessible route*

_____ *Emergency exit visibility*

_____ **Seating**

_____ *Surface conditions for deficiencies such as excessive wear, rough areas, or protruding hardware*

_____ *Track alignment*

_____ *Overall stability*

_____ *Overall integrity*

_____ *Railing conditions (per code requirements)*

_____ *Lubrication*

_____ *Passageway clearance and markings*

_____ *Overall condition*

_____ **Floors and mats**

_____ *Surface integrity*

_____ *Overall condition for deficiencies such as excessive wear, stains, tears, and tripping hazards*

_____ ***Walls/ceiling***

_____ *Paint condition*

_____ *Plaster/drywall condition*

_____ *Overall condition*

_____ ***Bell system operation***

_____ ***Scoreboard***

_____ *Operation (audio and visual)*

_____ *Bulb conditions*

_____ *Overall condition*

_____ ***Sound/speaker system***

_____ *Operation*

_____ *Clarity*

_____ ***Lighting fixture protection conditions***

_____ ***Gymnastic equipment***

_____ *Positioning*

_____ *Member integrity*

_____ *Bar/rope conditions*

_____ *Overall condition*

_____ ***Team/coaches' benches***

_____ *Stability*

_____ *Condition of surfaces for deficiencies such as excessive wear, rough areas, or*

protruding hardware

_____ *Cleanliness*

_____ *Positioning*

_____ *Overall condition*

_____ ***Staging equipment***

_____ *Member integrity*

_____ *Wheel conditions*

_____ *Edge conditions*

_____ *Overall condition*

_____ ***Signage (See also Signage checklist)***

_____ *Currency of message*

_____ *Location*

_____ *Overall condition*

_____ ***Fire extinguishers (See also annual checklist for Fire Extinguishers)***

_____ *Charge*

_____ *Tag currency*

_____ *Placement in correct proximity to potential hazards per code*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

_____ ***Trash receptacles***

_____ *Location*

_____ *Overall condition*

_____ ***Clock operation***

_____ ***Closets/equipment storage area***

_____ *Door/lock operation*

_____ *Appearance, interior and exterior*

_____ *Overall condition for debris and safety hazards*

_____ ***Refreshment stand/area (if applicable)***

_____ *Cleanliness*

_____ *Appliance operation and condition* (See also **Kitchen and Dining Areas** checklist)

_____ *Utility connections (check for gas leaks)* (See also **Gas Connections** checklist)

_____ *Furniture condition and cleanliness*

_____ *Floor condition and cleanliness*

_____ ***Wall and ceiling conditions and cleanliness***

_____ *Vent and trap cleanliness*

_____ *Overall condition*

Monthly

Locker Rooms

The following monthly checklist applies to locker areas that house individual student lockers, as well as those that function as part of gymnasium areas that feature sport equipment, sport lockers, showers, and changing areas. (*Preventive maintenance for general features including **Restrooms, Lighting, Alarm Systems, Fire Extinguishers, Doors and Windows, and HVAC Systems** also applies to this area. Refer to the corresponding checklists.*)

_____ ***Fire safety***

_____ *Electrical outlet load*

_____ *Positioning of flammable materials away from heat sources*

_____ *Accessible route*

_____ *Emergency exit visibility*

_____ ***Benches***

_____ *Surface conditions for deficiencies such as excessive wear, rough areas, or protruding hardware*

_____ *Stability*

_____ *Overall condition*

_____ ***Exercise/weight equipment***

_____ *Bolt conditions*

_____ *Fastener conditions*

_____ *Cable conditions*

_____ *Electrical connection conditions*

_____ *Pad conditions*

_____ *Runner conditions*

_____ *Overall condition*

_____ ***Bulletin board***

_____ *Mounting condition/stability*

_____ *Overall appearance*

_____ *Overall condition*

_____ ***Floors***

_____ *Surface integrity*

_____ *Overall condition for deficiencies such as excessive wear, stains, tears, and tripping hazards*

_____ ***Lockers***

_____ *Lock operation*

_____ *Hinge conditions*

_____ *Paint condition*

_____ *Shelf stability and condition*

_____ ***Overall appearance***

_____ *Overall condition of lockers (group appearance)*

_____ ***Plumbing (See also Restrooms checklist)***

_____ *Connection conditions for deficiencies such as leaks, corrosion, and failure potential*

_____ *Overall appearance*

_____ *Overall condition*

_____ ***Showers***

_____ *Fixture conditions*

_____ *Surface/tile conditions*

_____ *Overall condition*

_____ ***Whirlpool function (if applicable)***

_____ ***Sinks and faucets***

_____ *Drainage function*

_____ *Hardware conditions*

_____ *Overall condition*

_____ ***Timer function (if applicable)***

_____ ***Trash receptacles***

_____ *Location*

_____ *Overall condition*

_____ ***Walls/ceiling***

_____ *Paint condition*

_____ *Plaster/drywall condition*

_____ *Ceramic tile condition*

_____ *Overall condition*

_____ ***Signage (See also Signage checklist)***

_____ *Cleanliness*

_____ *Message currency*

_____ *General appearance*

_____ *Overall condition*

_____ ***Fire extinguishers (See also annual checklist for Fire Extinguishers)***

_____ *Tag currency*

_____ *Charge*

_____ *Placement in correct proximity to potential hazards per code*

_____ *Housing condition*

_____ *Hose condition*

_____ *Overall condition*

Monthly

Landscape

Due to the comprehensive nature of preventive maintenance, select critical areas within the landscape domain should be inspected monthly. Note: Make sure the actual number of drains and their locations correspond with those shown on the “as built” drawings.

(The Irrigation Controllers checklist also applies to this area.)

_____ ***Drains***

_____ *Proper water flow*

_____ *Piping conditions*

_____ *Cover conditions*

_____ *Overall condition for obstructions*

_____ ***Vegetation conditions for deficiencies such as root systems near buildings and walkways, shrubs and trees near buildings and power lines, vines on buildings (except as designed), and overgrown shrubs***

_____ ***Irrigation systems (See also annual Irrigation Controllers checklist)***

_____ *Sprinkler head operation and direction of water flow*

_____ *Piping integrity*

_____ *Runoff conditions*

_____ ***Overall appearance***

Monthly

Asphalt

Asphalt surfaces at school facilities receive extensive wear and tear from contact with buses, cars, and pedestrians. Because such deficiencies as potholes, broken edges, and eroded areas can jeopardize life safety, it is essential for maintenance personnel to take monthly measures to promptly address and anticipate failing elements. The Americans with Disabilities Act also requires accessible parking spaces and pathways, slip-resistant surfaces, and curb cuts.

This checklist can be applied to all of the following areas.

- Walkways
- Parking lots
- Driveways
- Other athletic activity areas *(See also Playgrounds and Tennis Courts)*

_____ ***Parking bumper conditions and position***

_____ ***Speed bump conditions***

_____ *Striping and pavement signage conditions*

_____ *ADA accessibility*

_____ *Signage (See also Signage checklist)*

_____ *Compliance with codes and standards*

_____ *Message currency*

_____ *Visibility*

_____ *Overall condition*

_____ *Edge conditions*

_____ *Surface conditions for deficiencies such as buildup from salt, ice melting materials, motor oil, or gasoline*

_____ *Overall appearance*

_____ *Overall condition for deficiencies such as potholes, softening, erosion, weed and root encroachment, chalking, cracking, and tripping hazards*

Monthly

Signage

Signage is not only important for directing school occupants and visitors, but it is also a reflection of the facility's character. Dirty, damaged, or inaccurate signage can send the wrong message to the community by making the school as a whole appear neglected. It can also jeopardize the safety of users. Signage must comply with codes and standards, such as the ADA, and is important for alerting area users of potential hazards, recent changes, or other important messages. A critical eye is needed in the maintenance process to address and anticipate sign inadequacy. The following monthly checklist applies to wall-mounted and pole-mounted exterior signage, as well as interior signage.

_____ *Compliance with codes and standards*

_____ *Cleanliness*

_____ *Accuracy of message*

_____ *Accuracy of lettering and numbering*

_____ *Adherence to surface or stabilizer*

_____ *Hardware conditions*

_____ *Illumination (if applicable)*

_____ *Location and visibility*

_____ *Paint condition*

_____ *Overall appearance*

_____ *Overall condition for deficiencies such as excessive wear, missing or broken parts, obstruction from view, or message inaccuracy*

Monthly (In Season)

Track and Field Areas

The following checklist refers to permanently installed equipment and materials within track and field areas such as surfaces, bleacher/grandstand systems, goal posts (for sports such as football), water fountains, and surrounding fencing systems. Monthly preventive maintenance of these areas is crucial, as life safety can be jeopardized by something as small as a rusted fastener or missing part. (*The **Exterior Lighting and Fences** checklists also apply to this area.*) .

_____ ***Concrete, turf, dirt, and sand areas***

_____ *Overall integrity*

_____ *Overall condition for deficiencies such as tripping hazards, holes, cracks, and stray equipment*

_____ ***Water fountains***

_____ *Operation*

_____ *Bolt, nut, and anchor conditions*

_____ *Mounting security, if applicable*

_____ *Cleanliness*

_____ *Overall condition*

_____ ***Bleacher systems***

_____ *Structural stability, including railing, seating, and foundation*

_____ *Bolt, nut, spring, and anchor conditions*

_____ *Edge and surface conditions*

_____ *Overall safety and code compliance*

_____ *Overall condition for deficiencies such as rusted, missing, or broken components*

_____ ***Equipment***

_____ *Goal post stability*

_____ *Overall integrity*

_____ *Proper function, as intended*

_____ *Overall safety and code compliance*

_____ *Overall condition*

_____ ***Fencing (See also semiannual Fences checklist)***

_____ *Post stability*

_____ *Overall condition for deficiencies such as gaps, root/weed encroachment, and failing areas*

_____ ***Paint condition (of equipment, seating, etc.)***

Monthly (In Season)

Playgrounds

Playgrounds are areas of substantial liability and mandate frequent inspections and diligent maintenance. As playgrounds experience intense usage during the school day, after hours, and off-season, the wear of equipment and surfacing must be carefully monitored. Common equipment includes swing sets, climbing equipment and bars, slides, seesaws, sandboxes, merry-go-rounds, and skating areas, among other items.

Surfaced areas are of particular safety concern. Resilient surfaces, such as sand, mulch, and commercially prepared materials, shall be used beneath equipment to provide effective cushioning against falls. Child safety guidelines require a safe fall area extending around all equipment. Playground areas and equipment must be as accessible

as possible to students with disabilities. Often special ramps, surfaces, and equipment height requirements may be needed. At the minimum, there must be an accessible route to and through the areas, and 50% of elevated play components must be accessible by ramp or transfer platform.

This checklist provides a general safety and maintenance protocol only, as playground areas, surfaces, and equipment vary widely. Schools should work with insurance companies for additional specific recommendations and should consult manufacturers' specifications. (*The Fences, Signage, and Asphalt checklists also apply to this area.*)

_____ **General safety**

_____ *Signage visibility and currency (See also monthly **Signage** checklist)*

_____ *Safety/first aid equipment location near play areas*

_____ *Fence conditions for deficiencies such as holes, weed encroachment, and trash buildup (See also semiannual **Fences** checklist)*

_____ *Overall condition of grounds for deficiencies such as vandalism, debris buildup, trash, or tripping hazards*

_____ **Playground equipment**

_____ *Performance as intended, as per manufacturers' specifications*

_____ *Location of each piece of equipment (more than 30" high) at least 9' away from other items and away from curbs, rocks, or other hard surfaces*

_____ *Stability (equipment must be securely anchored into the ground. Footings must be unexposed. Follow manufacturers' guidelines)*

_____ *Surface conditions for deficiencies such as excess wear, rough or protruding edges, wood splintering, metal exposed to the sun (can cause burns), or rust*

_____ *Hardware conditions for deficiencies such as open S-hooks, protruding bolt ends, and loose parts*

_____ *Chain/cable conditions for integrity and durability*

_____ *Paint conditions for deficiencies such as paint chips, cracks, chalking, or rust*

_____ *Spring conditions for deficiencies such as improper compression, rust, or breakage*

_____ *Lubrication of all adjacent moving parts*

_____ *Railing stability and surface conditions*

_____ *Drainage from surfaces (equipment should drain water properly to deter slippage)*

_____ *Overall condition and durability for deficiencies such as excess wear, rot, rust, splintering, warping, cracking, insect infestation, or broken or missing parts*

_____ ***Playground surfaces***

_____ *Asphalt: See **Asphalt** checklist.*

Note: Asphalt surfacing should not be used under playground equipment.

_____ *Concrete*

Note: Concrete surfacing should not be used under playground equipment.

_____ *Overall condition for deficiencies such as tripping hazards, alkali-aggregate expansion, cavitation, honeycombing, spalling, chipping, cracks, crazing, dusting, efflorescence, charred surfaces, stains, lifts, pock marks/pop-outs, scaling, slippery areas, unevenness, or voids*

_____ *Loose material: sand, gravel, wood fiber, or shredded rubber*

_____ *Layer depth/coverage of ground (consistent depth of at least 12")*

Tip: Place depth marker nearby to ensure constant adequate depth.

_____ *Boundary/containment conditions to ensure material stays where intended*

_____ *Dispersion to ensure material evenly covers areas at least 6' in all directions from equipment*

_____ *Material conditions for deficiencies such as clumping, rot, or fungus infiltration*

_____ *Drainage*

_____ *Overall condition for deficiencies such as foreign objects, trash, and contamination from oil, grasses, gravel, animal matter, or weeds*

_____ *Compressed rubber matting*

_____ *Overall integrity and durability*

_____ *Adherence to surface*

_____ *Overall condition for deficiencies such as excessive wear, holes, curling, tightness of seams, tears, stains, vandalism, debris buildup, or trash*

_____ *Adjacent area conditions for objects that could harm material such as rocks, sticks, loose gravel, sand, or sprinkler overspray*

_____ *Grass*

Note: Grass should not be used under playground equipment.

_____ *Overall condition for deficiencies such as overgrowth, exposed soil, excess fertilization (granules left on surface), contamination from foreign substances, rodent infestation (e.g., gopher holes), root encroachment, depressions, or other tripping hazards such as rocks, elevated sprinkler heads, hoses, field markers, exposed irrigation pipes, or base markers*

_____ *Soil*

Note: Soil should not be used under playground equipment.

_____ *Overall condition for deficiencies such as eroded areas, pot holes, depressions, mud buildup, contamination from foreign substances, uneven surfaces, excess dust buildup, or tripping hazards such as root encroachment, base markers, or rocks*

Monthly (In Season)

Tennis Courts (Hard)

The safety of students and visitors is the focus of PM for tennis courts, which should be maintained monthly. Tennis courts are widely used by sporting teams and the general student population, as well as community members. Such use can lead to rapid wear and tear. (*The **Exterior Lighting** and **Fences** checklists also apply to this area.*)

_____ ***Deck***

_____ *Coating condition*

_____ *Overall condition for deficiencies such as ponding, cracks, holes, weed/root encroachment, tripping hazards, or excessive wear*

_____ ***Fencing (See also semiannual Fences checklist)***

_____ *Post stability*

_____ *Alignment*

_____ *Backdrop condition (where applicable)*

_____ *Overall condition for deficiencies such as gaps, weed/root encroachment, and failing areas*

_____ ***Gates***

_____ *Lock function*

_____ *Closure function*

_____ *Hinge conditions*

_____ *Alignment*

_____ *Lubrication*

_____ *Webbing condition*

_____ *Overall condition*

_____ ***Nets***

_____ *Overall condition for deficiencies such as holes, slack areas, and sagging*

_____ ***Posts***

_____ *Alignment*

_____ *Hardware conditions*

_____ *Stability*

_____ *Base integrity*

_____ *Overall condition*

_____ ***Overall condition***

Monthly

Exterior Stairs, Decks, and Landings

The following is a PM checklist for exterior stairways, decks, and landings. Maintenance personnel should carefully check the building materials, particularly concrete, on a monthly basis. (*The **Exterior Lighting** checklist is also applicable to these areas.*)

_____ ***Overall appearance***

_____ **Concrete**

_____ *Expansion joint conditions*

_____ *Metal spacer conditions*

_____ *Overall condition for deficiencies such as alkali-aggregate expansion, cavitation (honeycombing, spalling around projections), chips, cracks, crazing, dusting, efflorescence, charred and spalled surfaces, stains, lifted areas, pock marks/pop-outs, scaling, tripping hazards, unevenness, or voids*

_____ **Railings**

_____ *Stability*

_____ *Hardware conditions*

_____ *Overall condition*

_____ **Wood material (if applicable)**

_____ *Stability*

_____ *Overall condition for deficiencies such as dry rot, termites, instability, worn edges, cracks, holes, and splintering*

_____ **Coverings**

_____ *Surface condition*

_____ *Overall integrity*

_____ *Overall condition*

_____ **Grade appearance**

_____ **Footings/foundation**

_____ *Stability*

_____ *Overall condition for deficiencies such as cracks and broken or missing components*

Monthly

Non-Power Gates

The operational integrity of gates on school grounds is crucial to ensure that the elements of safety and controlled access are not compromised. Whereas automated gates should be inspected biweekly, non-power gates shall be examined monthly.

_____ ***Chains***

_____ *Linkage conditions*

_____ *Lubrication*

_____ *Overall condition for deficiencies such as cracks and excess tension*

_____ ***Emergency key boxes***

_____ *Hinge conditions and operation*

_____ *Lock conditions and operation*

_____ *Key placement*

_____ *Overall condition*

_____ ***Hinge conditions and lubrication***

_____ ***Weld joint conditions***

_____ ***Bolt and screw conditions***

_____ ***Locks***

_____ *Overall operation*

_____ *Lubrication*

_____ *Security*

_____ *Overall condition*

_____ ***Painted surfaces***

_____ *Overall condition for deficiencies such as rust, peeling, and abrasion*

_____ ***Structural condition***

_____ *Stability*

_____ *Joint conditions*

_____ *Overall condition for deficiencies such as weak spots, rust, or missing parts*

_____ ***Tracks***

_____ *Alignment*

_____ *Lubrication*

_____ *Adherence to surface*

_____ *Overall condition for deficiencies such as dents and rust*

Semiannual

Fences

Fences on school property are usually made of aluminum, steel, concrete block, or wood. Metal fences, such as chain link, require regular inspection of paint condition, rust and other corrosion, and vegetation and trash buildup. Wood fences are additionally susceptible to rot and loose components, such as pickets, planks, and braces. Perimeter and boundary fences shall be checked semiannually.

_____ ***Alignment***

_____ ***Structural stability***

_____ *Post integrity and alignment*

_____ *Foundation integrity*

_____ *Overall condition*

_____ ***Paint condition***

_____ ***Hardware condition and lubrication***

_____ ***Gate and lock function and conditions***

_____ ***Safety for deficiencies such as sharp edges, large gaps,***

and splintering

_____ *Overall condition for deficiencies such as vegetation encroachment, debris buildup, holes, sagging areas, missing segments, rot, fungus, termites, and rust*

Semiannual

HVAC Systems

Regular preventive maintenance of HVAC (heating, ventilation, and air-conditioning) systems is crucial to the quality of air and comfort level within school facilities. HVAC systems should always sufficiently control temperature and humidity, distribute outside air uniformly, and isolate and remove odors and pollutants. Improper function and maintenance can cause indoor air pollution by allowing stale or contaminated air to remain in the building. As there are many areas within a school that house activities with unique ventilation requirements, such as art, shop, culinary, and laboratory classrooms, it is essential that the HVAC system has fully functional and regularly inspected pressure control, filtration, and exhaust equipment.

The following checklist shall be used for semiannual inspections of the HVAC system.

When performing any maintenance procedures, always refer to manufacturers' recommendations.

For all types of HVAC systems, change filters twice a year and post a sticker on the HVAC unit with the date of change and initials of the mechanic. Use only MERV 13 rated filters unless otherwise directed by the Maintenance Supervisor.

_____ *General conditions*

_____ *Overall cleanliness*

_____ *Wall mount stability*

_____ *System calibration*

_____ *Condensation drain condition (A/C only)*

_____ *Electrical connection conditions*

_____ *Filter conditions (Use only MERV filters)*

_____ *Motor*

_____ *Lubrication*

_____ *Housing stability*

_____ *Connection conditions*

- _____ *Oil cup conditions*
- _____ *Unit operation and noise level*
- _____ *Coil conditions*
- _____ *Window seal and gasket conditions*

_____ ***Central/ground or roof mounted***

- _____ *Air filter conditions*
- _____ *Burner assembly conditions*
- _____ *Circulation*
- _____ *Combustion chamber/smoke pipe conditions*
- _____ *Condensate drain conditions (A/C only)*
- _____ *Condenser/compressor function*
- _____ *Cooling coil conditions*
- _____ *Electrical disconnect function*
- _____ *Electrical heating unit function*
- _____ *General wiring and electrical control conditions*
- _____ *Guard, casing, hanger, support, platform, and mounting bolt conditions*
- _____ *Piping conditions*
- _____ *Liquid receiver conditions*
- _____ *Lubrication*
- _____ *Motor, driver, and assembly conditions*
- _____ *Platform stability*
- _____ *Pump unit function*
- _____ *Refrigerant dryer, strainer, valve, oil trap, and accessories conditions*

_____ *Refrigeration lines/coil conditions for deficiencies such as frosting or icing*

_____ *Registers and ducts for proper air distribution*

_____ *Temperature and humidity control function*

_____ *Thermal insulation and vapor barrier conditions*

_____ *Water spray, weir, and similar device conditions*

_____ *Overall cleanliness*

_____ *Overall condition for deficiencies such as rust, corrosion, and mineral deposits*

_____ ***Heat pumps***

Check all items listed above under “central/ground/roof mounted,” plus:

_____ *Temperature setting*

_____ *Noise and vibration levels*

_____ ***Heating systems (See also annual checklist for Hot Water Heaters)***

_____ *Amp draw per manufacturer’s specs*

_____ *Equipment cleanliness*

_____ *Flow switch operation*

_____ *Mechanical equipment function*

_____ *Pull header conditions (on units more than 5 years in age)*

_____ *Pumps*

_____ *Function*

_____ *Oil condition*

_____ *Overall condition*

_____ *Safety limit switch operation*

_____ *Water temperature (in and out)*

_____ *Overall condition for deficiencies such as corrosion, scale, and entrapped air*

_____ **Boilers**

(Note: Shall be performed by a licensed professional inspector/maintenance contractor to ensure compliance with state and federal regulations.)

_____ *Air heater function*

_____ *Auxiliary equipment function*

_____ *Back feed pumps function*

_____ *Blowoff and blowdown lines function*

_____ *Boiler room log condition*

_____ *Burner and control conditions*

_____ *Deaerator function*

_____ *Energy efficiency*

_____ *Electric power function*

_____ *Feedwater supply conditions*

_____ *Feedwater treatment/control*

_____ *Firing rate control conditions*

_____ *Fuel supply line conditions*

_____ *Fuel system/control conditions*

_____ *Heat recovery equipment conditions*

_____ *Limit device conditions*

_____ *Pressure gauge and relief valve function*

_____ *Overall cleanliness*

_____ *Overall condition*

_____ **Overall safety**

_____ *Anchor stability*

_____ *Deck areas for deficiencies such as moisture, grease, mold, and tripping hazards*

_____ *Doors*

_____ *Hinge conditions*

_____ *Lock and knob function*

_____ *Guard stability per code*

_____ *Overall condition*

_____ *Handrail stability*

_____ *Harness*

_____ *Fastener conditions*

_____ *Strap conditions*

_____ *Tie conditions*

_____ *Overall condition*

_____ *Ladders*

_____ *Step conditions*

_____ *Rail stability*

_____ *Overall condition*

_____ *Vibration limit switch function*

_____ *Work area conditions*

_____ *Top surface/fan deck conditions*

_____ *Water distribution system*

_____ *Distribution pipe condition*

- _____ *Eliminator conditions*
- _____ *Hot water distribution basin support member conditions*
- _____ *Internal strainer conditions (if applicable)*
- _____ *Lubrication of flow control valves*
- _____ *Spill flash bar conditions*
- _____ *Structural integrity*
- _____ *Bolted joint conditions*
- _____ *Nozzle conditions*
- _____ *Overall condition for deficiencies such as leads between joints, leaks, corrosion, buildup, breaks, and obstructions*
- _____ *Overall condition for deficiencies such as leaks, cracks, deterioration, end panel separation, corrosion, pitting, wood casing for signs of rot, brittleness or cracking of fiberglass*
- _____ *Safety limit and interlock function*
- _____ *Shutdown operation*
- _____ *Walkway/platform stability and condition*
- _____ ***Overall condition***

Semiannual

Asbestos

As required by federal law all identified asbestos containing materials (ACM) must be inspected every six months by a trained school staff member. Physically look at each area identified in the school's asbestos management plan to ensure that ACM have not been damaged or deteriorated so as to become friable. In the event any ACM must be removed, mark the area according to the plan and perform abatement as necessary.

Smoke Alarms

The following is a preventive maintenance checklist for individually installed smoke alarms that are not part of the larger automated alarm system. This check shall be performed semiannually. These smoke alarms may be battery-operated or hard-wired, and may be found in various areas of the facility, including out buildings. (*See Alarm*

Systems checklist for automated smoke alarms.)

_____ *Battery efficiency (if not hard wired)*

_____ *Connection conditions for proper wiring and deficiencies such as arcing or exposed wires*

_____ *Housing condition*

_____ *Mounting security*

_____ *Overall operation*

_____ *Overall condition*

Semiannual

Structural Members

Preventive maintenance entails a comprehensive visual inspection of each building material twice a year. Particular emphasis during this inspection process should be on load-bearing support areas that can be observed externally during a walking tour. The greatest cause of building demise is the penetration of water. Particular attention should be given at this time to evaluate the potential for access by water into building materials.

_____ *Beam integrity for deficiencies such as rot, termites, bowing, splitting, slippage, or fungus*

_____ *Foundation condition for deficiencies such as cracking, slippage, or water encroachment*

_____ *Joist conditions for deficiencies such as rot, termites, bowing, splitting, or fungus*

_____ *Overall building integrity for signs of structural failure*

_____ *Sill conditions for deficiencies such as rot, termites, or fungus*

_____ *Stud conditions for deficiencies such as rot, termites, bowing, splitting, or fungus*

_____ *Wall conditions*

_____ *Masonry for deficiencies such as cracks, scaling, mortar, crumbling, or efflorescence*

_____ *Wood for deficiencies such as termites, peeling paint, dry rot, popping, or fungus*

_____ *Overall condition*

Annual

Emergency Generators

The emergency generator in a school should be maintained annually. However, during the school year, the fuel level, battery charge, cleanliness, and wiring shall be checked monthly. PM shall also be performed after each use of the generators.

_____ *Operation*

_____ *Fuel level*

_____ *Oil and engine air filter conditions*

_____ *Battery charger condition*

_____ *Battery conditions for proper charge and connection*

_____ *Gauge conditions*

_____ *Circuit breaker conditions*

_____ *Activation device conditions (starter, pull cord, switches, etc.)*

_____ *Spark plug conditions*

_____ *Terminal conditions*

_____ *Belt conditions for deficiencies such as wear and stress*

_____ *Wiring conditions*

_____ *Cleanliness*

_____ *Overall condition*

Annual

Backflow Devices

Backflow devices prevent the flow of water or other liquids, mixtures, or substances into the distributing pipes of a potable supply of water from any source other than intended. All backflow devices shall be tested annually by a certified contractor. Maintenance personnel shall monitor the contractor's performance and obtain written certification upon completion of work.

_____ *Backflow devices (shall be tested only by a certified contractor)*

Annual

Electrical Systems

Electrical systems and closets shall be inspected annually. Maintenance personnel will be familiar with the locations of all electrical equipment, including circuit breakers, fuses, main feeders, subfeeders, panel boards, and substations. All wiring shall be in compliance with the National Electric Code. The safety of workers is paramount; staff shall ensure that power is shut off and/or lines are de-energized where work is performed and that the LOCK-OUT TAG-OUT system is used. Electrical equipment will be serviced by outside contractors unless there is a licensed journeyman electrician among the in-house staff. .

_____ *Equipment cleanliness*

_____ *Distribution system*

_____ *Wire and cable conditions for deficiencies such as corrosion, dirt, moisture, and fire hazards*

_____ *Connection conditions*

_____ *Overall condition*

_____ *Circuit breakers*

_____ *Oil level and potential leakage*

_____ *Hardware conditions*

_____ *Porcelain condition*

_____ *Cotter pin conditions*

_____ *Air supplier operation*

_____ *Overall condition for deficiencies such as corrosion, noise, and excessive*

temperatures

_____ ***Fuses***

_____ *Insulator conditions for deficiencies such as burns or cracks*

_____ *Contact surface conditions for deficiencies such as burning, pressure, and misalignment*

_____ *Fuse holder conditions*

_____ *Hardware condition*

_____ *Overall condition*

_____ ***Lock security and lubrication***

_____ *Utility room cleanliness and safety*

_____ *Overall integrity*

_____ *Overall condition for deficiencies such as loose wires, debris, corrosion, potential power failure, and water encroachment*

Annual

Elevators

Elevators shall be serviced annually by a licensed elevator contractor. Elevators shall be

Inspected annually by the state Department of Labor.

_____ ***Elevators***

Annual

Fire Extinguishers

The following annual PM checklist is for fire extinguishers throughout the school facility. This inspection and certification must be conducted by a licensed specialty contractor and should be scheduled in advance to ensure that the date on extinguishers will not expire.

*Monthly inspections of fire extinguishers' general condition, housing, and location per code shall be conducted as part of preventive maintenance procedures in areas of the school including **Business Offices, Kitchen and Dining Areas, Classrooms, Auditorium, Library, Gymnasium, Locker Rooms, Restrooms, and Swimming Pools.** (See corresponding checklists.)*

_____ ***Certification***

_____ *Charge*

_____ *Housing condition*

_____ *Hose condition*

_____ *Proper location per code*

_____ *Overall condition*

Annual

Hot Water Heaters

Preventive maintenance of hot water heaters shall be performed annually. (*See also HVAC Systems for other heating components.*)

_____ *Circulation pump connections*

_____ *Gas flame color (gas pilot should be blue with yellow at tip)*

_____ *Burner conditions for deficiencies such as corrosion, inordinate flame pattern, and cinders*

_____ *Pilot function*

_____ *Tank plate and jacket conditions for deficiencies such as corrosion or rust*

_____ *Door and lock function*

_____ *Drain valve lubrication and function*

_____ *Earthquake strap and bolt conditions*

_____ *Gas shut-off valve lubrication and function*

_____ *Piping supply lines for leaks*

(Note: Use soap and water and/or hand-held gas detector)

_____ *Pressure relief valve function*

_____ *Temperature setting*

(Note: Use commercial grade thermometer)

_____ *Draft diverter conditions*

_____ *Flue and chimney conditions*

_____ *Vent condition*

_____ *Utility room for deficiencies such as dirt, debris, and storage of materials*

_____ *Overall condition for deficiencies such as rust in water, water and fuel leaks, and unusual sounds or odors*

Annual

Roofing

The roof is the most costly and abused area of the facility, subject to a variety of weather conditions and temperature fluctuations. The early discovery and preventive maintenance of minor deficiencies extends its life and reduces the chance of premature failure and costly repairs.

Annual inspections of both membrane and building components shall be conducted for all roofs, including newly installed ones. Adequate time will be allotted to properly perform the many tasks involved in inspection. A roof will be surveyed completely, either by carefully walking it in its entirety where accessible (wearing soft shoes), or by visual inspection with binoculars where inaccessible. Visual inspection from the attic side is also important.

Attention should be paid to southern and northern exposures, weather-generated problems, horizontal lines, peak areas, and areas of sagging. Ventilation areas should also be examined for obstructions. (*For preventive maintenance of **Gutters/Roof Drains**, see corresponding annual checklist.*)

_____ *Supporting structural integrity for deficiencies such as cracks, moisture stains, and potential failure*

_____ *Flashing conditions for deficiencies such as water penetration, displacement, oxidation, excessive stretching, delamination, and tearing*

_____ *Surface conditions for deficiencies such as contaminants such as exhaust or vegetation buildup*

_____ *Subsurface conditions (including insulation) for signs of moisture penetration*

_____ *Membrane conditions*

_____ *Chimney conditions*

_____ *Parapet integrity*

_____ *Plumbing stack vent and roof connection conditions*

_____ *Roof ventilation conditions*

_____ *Skylight conditions for deficiencies such as broken glass or frames and flashing corrosion or rust*

_____ *Structural conditions for deficiencies such as settling of the deck, membrane splits, or cracks in walls*

_____ *Roof edging conditions for deficiencies such as deterioration and loose fasteners*

_____ *Expansion joint conditions for punctures, splits, and insecure fasteners*

_____ *Shingle conditions*

_____ *Asphalt roof conditions for deficiencies such as brittle or missing shingles, cracking, curled edges, erosion, or exposed wood*

_____ *Flat roof conditions for evenness across the horizontal plane and deficiencies such as bare areas, blisters, cove areas abutting parapets, cracks, curling, exposed nail heads, or ponding*

_____ *Overall condition*

Annual

Gutters/Roof Drains

Drainage devices are important in protecting buildings from water intrusion and damage. The following is an annual preventive maintenance checklist for gutters, downspouts, scuppers, and roof drains. Maintenance personnel shall ensure that these areas are free of debris such as leaves and branches, and that large debris has also been removed from the roof.

_____ *Mounting stability*

_____ *Bolt, screw, and strap conditions*

_____ *Discharge area function for proper drainage away from building*

_____ *Joint conditions and stability*

_____ *Roof atrium drains*

_____ *Cleanliness*

_____ *Caulking condition*

_____ *Mounting stability*

_____ *Overall condition for deficiencies such as blockage and cracks*

_____ *Splash block location*

_____ *Seam and elbow conditions*

_____ *Caulking condition*

_____ *Gutter positioning toward downspouts*

_____ *Overall condition for deficiencies such as corrosion, rust, blockage, obstructions, and disconnection*

Annual

Sewer Laterals

All drain lines in the physical school facility connect to the main drain, which is referred to as the “sewer” beyond the foundation. All sewer lines outside of the foundation have clean-out points at various locations. Reaming from these points requires the use of a high-power hose, hydro-jet, or power equipment. Sewer laterals should be annually reamed from clean-out points by in-house personnel.

_____ *Caulking condition adjacent to building exit point*

_____ *Plug conditions*

_____ *Pipe integrity*

_____ *Plaster condition adjacent to building exit point*

_____ *Overall condition for deficiencies such as soil erosion (if line exits ground)*

Annual

Irrigation Controllers

Annual inspection of each irrigation controller helps guarantee operational performance. This should be done jointly with a landscape contractor. (*See also monthly **Landscape checklist.***)

_____ *Timer accuracy*

_____ *Housing condition for deficiencies such as water encroachment*

_____ *Door and lock function and conditions*

_____ *Electrical connection conditions*

_____ *Security (stations should be locked)*

_____ *Overall condition*

Annual

Storm Drains

Storm drains or sewers are underground systems used to collect and dispose of surface water. They shall be cleaned and flushed annually to ensure blockages are removed and piping is functional.

_____ *Grate conditions*

_____ *Cover conditions*

_____ *Adjacent concrete or asphalt conditions*

_____ *Drainage*

_____ *General safety conditions*

_____ *Overall condition for deficiencies such as dirt buildup around drain that might preclude proper directional flow*

Every Two Years

Outdoor Grandstands and Indoor Bleachers must be inspected by a professional engineer, registered architect, or individual certified by the manufacturer as required by the Life safety Code, NFPA 101-2003 Sections 13.7.9 and 13.7.10.

Every Three Years

Asbestos. Every three years an inspection of all asbestos containing materials (ACM) must be performed by a licensed asbestos contractor as required by federal law.

Every Five Years

Fire System Certification

Comprehensive servicing and certification of the entire fire suppression system should be done every five years in accordance with current local, state, and federal requirements, including NFPA-defined guidelines. A licensed state contractor must be used, and this work shall be validated by local fire authorities.

The following items should be inspected by the contractor during this process.

- Signal initiation
- Manual alarm operation
- Water flow system components including valves, piping, pressure regulators, gauges, sprinkler heads, and shut-off operation
- Smoke detection systems
- Voice systems
- Automatic extinguishing systems
- Signage, visual notifications
- Supervisory signals
- Maintenance testing and protocol
- Central station monitoring
- Code compliance

_____ *Fire system certification (should be tested only by a certified contractor)*

8 - WORK ORDER SYSTEM

Any school staff member may submit a work order for facility maintenance or an event support request using one of the following forms. The requestor shall complete section 1 of the appropriate form and submit the form to the maintenance department administrative assistant. In the event of an emergency such as a broken pipe, the requester shall notify the maintenance department by the fastest possible means. A work order for emergency work shall be completed after the fact by the maintenance department administrative assistant.

The maintenance department administrative assistant shall initiate work orders for preventive maintenance (PM) according to the PM schedule.

The maintenance department administrative assistant shall review all submitted forms for completeness, assign a work order number, enter the form in the work order log, and forward the form to the maintenance supervisor.

The maintenance supervisor shall review the request and assign one of the following priorities:

IMMEDIATE - Work must be completed within 4 hours to prevent further damage to property or to correct an immediate safety risk.

URGENT - Work must be completed within 48 hours to prevent an unacceptable interruption of school operations.

ROUTINE – Work must be completed as soon as possible, but the problem is not expected to adversely affect school operations.

DEFERRED – Work shall be completed at a future date when resources are available.

The maintenance supervisor shall assign the work to a technician and schedule the work for completion.

The technician shall complete the assigned work or indicate that parts need to be ordered. If parts need to be ordered the technician shall enter the necessary information on the work order and return it to the maintenance supervisor. If parts do not need to be ordered, the technician shall complete the work and indicate completion on the work order which shall then be returned to the maintenance administrative assistant.

If parts are to be ordered, the maintenance supervisor shall review and approve the parts request and forward the work order to the maintenance administrative assistant who will order the parts. When the parts are received, the administrative assistant shall notify the maintenance supervisor who shall assign and schedule the work for completion.

The maintenance administrative assistant shall log all completed work orders and notify the requestor that the work has been completed.

_____ SCHOOL DISTRICT FACILITY WORK ORDER				
SECTION 1 To be completed by the individual requesting work				
REQUESTED BY			DATE	
PROBLEM OR WORK REQUESTED				
SECTION 2 To be completed by the maintenance department				
DATE RECEIVED			WO #	
PRIORITY:	IMMEDIATE	URGENT	ROUTINE	DEFERRED
APPROVED BY				
ASSIGNED TO			DATE	
PARTS REQUIRED				
PARTS APPROVED BY			DATE	
PARTS ORDERED BY			DATE	
WORK COMPLETED BY			DATE	
WORK PERFORMED				

_____ SCHOOL DISTRICT EVENT SUPPORT REQUEST	
SECTION 1 To be completed by the individual requesting support	
REQUESTED BY	DATE OF REQUEST
EVENT	DATE OF EVENT
LOCATION	START TIME
	END TIME
SUPPORT REQUESTED (Circle all that apply)	
FOLDING CHAIRS # _____	BLEACHERS
SOUND SYSTEM	TELEVISION
PROJECTOR SCREEN	PROJECTOR
ROUND TABLES # _____	LONG TABLES # _____
FIELD MARKING	OTHER: _____
SPECIAL INSTRUCTIONS	
SECTION 2 To be completed by the maintenance department	
DATE RECEIVED	WO #
APPROVED BY	DATE
ASSIGNED TO	DATE
INSTRUCTIONS	
COMPLETED BY	DATE

9 - CONTRACTED SERVICES

(List name, address, and phone number for contractors)

Refuse Removal:

Snow Removal:

Cleaning Service:

Elevator Service:

Security Systems:

Fire Protection:

Electrician:

Plumber:

Telephone Systems:

Cable TV:

Hazardous Materials Disposal:

Recycling:

Sewer/Septic System:

10 – ENERGY MANAGEMENT

Energy Management Guidelines

Wise energy management is good for everyone. It contributes to the national goal of energy conservation, therefore extending the life of our available natural fuel reserves. It helps preserve our environment. Reducing the demand for electricity will reduce the amounts of emissions that power plants add to the air. This will also reduce the number of new power plants that will need to be built. Whatever we can do to modify our behavior and become more conscious of how electricity is used and wasted will benefit us all.

Energy Saving Strategies (Behavior Modification)

In our school district electricity costs are second only to salaries and benefits, exceeding the cost of textbooks or supplies or diesel fuel for the school buses. The U.S. Department of Energy estimates that at least a quarter of the dollars spent could be saved through better energy management. While it is true that much of these savings would require equipment or systems changes to achieve, just modifying the way we use our building will help tremendously. If each one of our schools turned off the lights for 1 minute the savings would be about \$655. If the same schools turned off the lights when they went to lunch the savings would be about \$19,650! If each school will reduce energy consumption even a small percentage a considerable amount of money will be available to reinforce our other budgetary needs.

Keep the doors closed when A/C is running. Air conditioning is a wonderful thing, but it is very costly. We have the capability of monitoring and controlling most of our systems from a central point and of adjusting run-time schedules that will keep the buildings comfortable and clean and still be efficient.

Turn the lights off when the room is unoccupied, even for only a few minutes. As much as 40% of the energy consumed is for lighting. Some rooms have wall switches that allow for partial lighting. Some have occupancy sensors. Both of these strategies can help reduce lighting costs. But, the biggest savings will be achieved by turning the lights OFF when the room is unoccupied. While it is true the life of a bulb can be shortened by turning it on and off, the balance point between turning a light on and off many times versus the energy savings gained by turning lights off when not needed is usually ten minutes or less. So, the rule of thumb should be: If a room is unoccupied for ten minutes or longer the lights should be turned off. This rule applies to either incandescent or fluorescent lights. Modern fluorescent lights use little starting energy contrary to the myth that operating fluorescent lights is cheaper than turning them on and off for brief periods. Turning them off helps them last longer and lowers energy costs.

Turn off televisions and VCRs when not in use. Like the lights, leaving equipment running when not in use wastes energy. The savings realized by turning off each TV or VCR might seem insignificant, but not when you

multiply it by the number of machines in your school or the entire district. Turn off computers at night and on weekends. That computer costs more than you think! The computer hard drive will use about 15.2 KWH per month if turned on/off each day and about 77.1 KWH if left on for 24 hours. By turning the computer and the monitor off at the end of each day and in the summer we will save about \$100 per year, per computer. And, computers generate a significant amount of heat that will need to be removed from the room.

Unplug appliances such as televisions and VCRs over the summer. Appliances like these draw a small amount of power even when turned off. Although the savings on each appliance is small, the number of TVs and VCRs in the building magnifies it.

Energy Management Checklist

To reduce energy consumption for air conditioning:

- A. Reset or set back thermostats to maintain specified settings for cooling and heating.
- B. Minimize conditioning of seldom-used spaces, such as storerooms or unoccupied classrooms.
- C. Where possible, such as in portable classrooms, turn the air conditioning off on weekends, holidays and off-shift hours.
- D. Turn off ventilating and exhaust equipment when not in use, such as in bathrooms and storerooms.
- E. Check for good fitting doors and windows.
- F. Block out morning and afternoon sun from shining through windows.
- G. Be sure the thermostat is working and the fan is set in the "Auto" mode.

To reduce energy consumption for lighting:

- A. Turn lights off in areas when they are not occupied.
- B. Reduce lighting levels where safety and performance would not be adversely affected, for example in hallways.
- C. Check the level of outdoor security lighting and make sure is turned off during daylight hours.
- D. Turn off sport fields, parking lot and gymnasium lights when not in use.

To reduce energy consumption for equipment:

- A. Turn off computers, overhead projectors, VCR's, TV's and copiers when not in use.
- B. Turn off water coolers and vending machines during vacation periods.
- C. Disconnect AV equipment during vacation periods.
- D. If possible stagger the start times on major equipment, such as air handlers and exhaust fans.