Prince William County Public Schools

Office of Facilities Services

Custodial Handbook 2016

Prince William County
PUBLIC SCHOOLS
Providing A World-Class Education

Introduction

Custodial Services' mission is to provide well-maintained, functional facilities conducive to ensuring a safe, clean, and healthy learning environment for all students, faculty, and administrators of Prince William County Public Schools.

School administrators and custodial staff should be able to meet the PWCS cleanliness standards cited below with the custodial positions allocated in the annual budget, providing they do not deviate extensively from the tasks required to meet the demands of the documented PWCS standards.

The tools and procedures outlined in this handbook, if followed, should enable a custodial staff to operate at maximum efficiency and hence be able to meet the standards.

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1. CLEANING STANDARDS

The foundation of the Prince William County Cleaning Standards is based on custodial staffing publications of the APPA Institute (Association of Higher Education Facility Officers) and Clemson University. Both organizations are noted authorities in the field of educational institution custodial work. The APPA publication, Custodial Staffing Guidelines for Educational Facilities, established five cleaning levels for schools and universities:

Level 1 - Ordinary Spotlessness
Level 2 - Ordinary Tidiness
Level 3 - Casual Inattention
Level 4 - Moderate Dinginess
Level 5 - Unkempt Neglect

The APPA level that best fits the established standards of Prince William County Schools is Level 2, which APPA defines as:

Floors and base moldings are clean and bright. There is no buildup in corners or along walls, but there can be up to one day's worth of dust, dirt, stains, or streaks.
All vertical and horizontal surfaces are clean, but marks, dust, smudges, and fingerprints are noticeable upon close observation. Lights all work and fixtures are clean.
Washrooms, shower fixtures, and tiles gleam and are odor-free. Supplies are adequate.
Trash containers and pencil sharpeners hold only daily waste, are clean and odor-free.

Clemson University's Custodial Staffing and Standards provides time-motion based standards for common custodial tasks. Custodial tasks commonly performed by custodians in a school setting were timed and analyzed to create reasonable expectations for such tasks.

The Prince William County Schools Custodial Services Department added a third intuitive factor, based on nearly one hundred years of total experience cleaning PWCS buildings. The following standards are based on a permutation of these two publications and the PWCS custodial services staff's intuitive criterion. The hope is that much of the subjectivity involved with ensuring all PWCS facilities are clean is removed, and custodial, as well as administrative staff, better understand what it means to "Meet PWCS Cleanliness Standards."

The Prince William County Schools Cleanliness Standards are as follows:

GENERAL HOUSEKEEPING AND APPEARANCE

The principles of Integrated Pest Management (IPM) should be followed, to include absence of open food, water and clutter. Occupants should police learning/work environment and equipment by cleaning telephones to their personal standards (custodians will not be evaluated by central office in this areas).

It is everyone's responsibility to help keep the learning environment clean and sanitary by picking up litter when noticed and encouraging students to do the same: Instill School Pride! School staff should ensure all air handling units are free of clutter and not blocked. Electrical panels should not be blocked; electrical rooms should not be used as storage areas.

ADMINISTRATIVE OFFICES

Carpets:
Vacuumed daily. Stains are spot treated immediately when noticed.
Base moldings:
Clean, with no build-up of dirt, dust or finish.
Uncluttered furniture:
Clean (may have two days' worth of dust, fingerprints or smudges noticeable upon close observation.)
Walls:
Clean marks. Clean, but may have two days' worth of dust, fingerprints or smudges noticeable upon close observation.
Windows and window ledges:
Clean and free of fingerprints, dust, smudges and cobwebs. Spot clean daily.
Trash receptacles:
Emptied daily and are clean and odor free.
Ceiling lights:
Need to be fully operational. (Evidence of a written request is available for lights requiring more than tube or bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

AUDITORIUM

Carpets:
Vacuumed daily. Stains are spot treated immediately when noticed.
Base moldings:
Clean, with no build-up of dirt, dust, or finish.
Seating:
Clean and free of gum, dirt, dust, pencil and ink marks.
Stage floor:
Molding and steps are clean and bright. Corners and edges of wall are free of dust, dirt, and litter build-up.

Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

BATHROOMS/RESTROOMS

Floors:
Clean, bright, and odor free. Corners and edges of wall are free of dirt, dust and grime. Mopped daily (or more often if required) with a disinfectant cleaning solution.
Walls and stalls:
Clean, bright and odor free. Cleaned daily (more often if required) with a disinfectant cleaning solution. The walls / wall tile under the electric dryers need to be monitored for water residue.
Chrome, porcelain, mirrors and soap dispensers:
Clean, bright, and odor free. Free of mineral deposits. Cleaned daily (more often if required) with a disinfectant cleaning solution.
Fixtures:
Clean, bright and odor free. They are cleaned daily (more often if required) with a disinfectant cleaning solution.
Trash receptacles:
Emptied daily and are clean and odor free.
Sanitary Boxes:
Lined with a plastic liner. They are clean, bright, and disinfected daily (more often if required) and odor free.
Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Supplies:
Are adequately stocked.
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

CLASSROOMS

Floors and base moldings:
Clean; bright; free of dirt, debris, gum, spills, spots, finish build-up; and dust mopped or swept daily. Spot mopped daily and damp mopped bi-weekly.
Walls:
Clean marks. Clean, but may have two days' worth of dust, fingerprints or smudges noticeable upon close observation. Graphite or pencil marks on walls are removed daily.
Student desks and uncluttered classroom furniture:
Clean, free of dust, fingerprints, tape and glue.
Trash receptacles:
Emptied daily and are clean and odor free.
Windows and window frames (inside):
Free of hand prints, tape, dust and cobwebs.

Chalkboard/whiteboard trays:
Trays are cleaned daily; the frames are dusted twice weekly.
Pencil sharpeners:
Emptied daily; graphite residue on walls and floors removed daily.
Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

CORRIDORS

Floors and base moldings:
Clean; bright; free of dirt, debris, gum, spills, spots, finish build-up; and dust mopped or swept daily. Damp mopped daily or utilize automatic scrubber machine.
Walk off mats:
Mats are vacuumed daily; carpet stains are spot treated immediately.
Walls and doors:
Free of tape, dust, glue and hand dirt.
Trash receptacles:
Emptied daily and are clean and odor free.
Stairs and handrails:
Free of dust, dirt, gum, smudges, cobwebs, spots and spills.
Drinking fountains:
Disinfected daily, free of mineral deposits, smudges, dust and litter.
Showcases:
Free of tape, dust, and smudges. The exteriors are spot cleaned daily.
Lockers:
Dusted daily.
Entry windows and door glass:
Free of hand prints, dirt, dust, and cobwebs; they are cleaned daily. Door frames and door plates are free of dust and dirt; they are cleaned twice weekly.
Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

CUSTODIAL OFFICE/SUPPLY/EQUIPMENT

Floors and base moldings:
Clean; bright; free of dirt, debris, spills, spots, finish build-up; and dust mopped or swept daily. Wet mopped daily. No build-up in corners or edges of walls. They are cleaned as needed.
Furniture:
Clean, but may have two days' worth of dust, fingerprints or smudges noticeable upon close observation.

Storage:
No storage in electrical rooms.
Supplies:
Adequate and accessible by custodial staff.
Equipment:
Operational and functional. Any equipment not fully operational will be locked out/tagged out or labeled for pickup. Damp mop heads are cleaned and disinfected after use. Dry mop heads are free of dust, dirt, and litter.
Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

DINING AREA

Floors and base moldings:
Clean; bright; free of dirt, debris, gum, spills, spots, finish build-up; and dust mopped or swept daily. Damp mopped daily or utilize automatic scrubber machine.
Walls and doors:
Free of dust, food and hand dirt; they are spot cleaned daily.
Furniture:
Cleaned and disinfected; free of gum, dirt, dust, and food. Table wheels are free of food.
Garbage cans:
Free of food, water and odor; they are cleaned and disinfected daily.
Windows, blinds, and window frames:
Clean and free of fingerprints, dust, smudges, and cobwebs. Spot clean daily. Window blinds should be dusted with a swiffer duster on an extended pole.
Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

GYMNASIUMS

Floors and base moldings:
Clean; bright; free of dirt, debris, gum, spills, spots, finish build-up; and dust mopped or swept daily.
Locker room floors:
Free of gum, dirt, dust, and litter. They are cleaned and disinfected daily.
Lockers:
Free of dust.
Seating:
Free of gum, spots, spills, and litter.
Auxiliary gym:
Floor and base moldings are clean and bright; they are free of dust, dirt, and finish build-up.

Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

LIBRARY

Carpets:
Vacuumed daily. Stains are spot treated immediately when noticed.
Base moldings:
Clean, with no build-up of dirt, dust, or finish.
Uncluttered furniture:
Clean (may have two days' worth of dust, fingerprints or smudges noticeable upon close observation.)
Accessible shelving:
Dusted twice weekly.
Trash receptacles:
Emptied daily and are clean and odor free.
Windows and window frames:
Clean and free of fingerprints, dust, smudges and cobwebs. Spot clean daily.
Ceiling lights:
Need to be fully operational. (Evidence of a work order request is available for lights requiring more than tube/bulb replacement.)
Unit ventilators or vent covers and grills:
Free of any blockage, dust, or litter in the vents and on top or in front of unit.

2. SCHEDULING

2.1 Scheduling Considerations

Effective scheduling is the key to successfully meeting the cleaning standards laid out in Chapter 1. There are several things to keep in mind when schedules are created for daily, project, or restoration cleaning:

- Schedules must be kept current. Adjustments should be made in the schedule as room or area use changes. The custodial supervisor should constantly communicate with the custodial staff and building administration, and develop the schedules with them.
- Consider the time of day to best accomplish different tasks.
- Schedule project cleaning during teacher workdays, winter break and spring break. Project cleaning includes storage closet restoration, cleaning lights and heat registers, or library and main office restoration.
- Save time by arranging for jobs in the same general area to be done at the same time. Avoid making schedules where it is necessary to keep switching between tasks. For instance, clean all the restrooms while the tools and materials are being used.
- Post the schedule for all to see (including office staff and principal). Discuss the schedule with the staff at the beginning of the scheduling period, ensuring everyone knows their part.

2.2 Making a Successful Cleaning Schedule

Occasionally, it may be necessary to clean additional areas due to the absence of another custodian, or because of some special need. It is imperative that work is prioritized properly when all work cannot be accomplished due to irregular circumstances (i.e. pull trash, clean restrooms and hallways are top priorities).

2.3 Cleaning Schedules &Time Efficiency

By becoming familiar with a building, the custodial staff should know it well enough to reduce the cleaning time considerably. Once a routine is established that minimizes time and effort, it should be adhered to. Cleaning a building the same way every time, accomplishes two things: staff will be less apt to miss a key task because it is approached from the same direction each time and speed will increase as work habits become routine.

2.4 Preparing the Work Schedule

A properly prepared work schedule is important to the effectiveness of the custodial staff. It allows the custodians to “plan the work and work the plan.” The custodial staff must realize that a work schedule is a guide that is developed through experience. Flexibility is necessary to address unanticipated tasks.

3. BLOOD BORNE PATHOGENS

Every day in the United States approximately 5.6 million workers are at risk of exposure to blood borne pathogens such as human immunodeficiency virus (HIV), the Hepatitis B virus (HBV), and the Hepatitis C virus (HCV).

OSHA Blood Borne Pathogens standards prescribe safeguards to protect workers against health hazards from exposure to blood and other potentially infectious materials, and to reduce their risk from this exposure.

Hepatitis B Vaccination

This vaccination is made available, free of charge to all employees at risk of exposure within 10 working days of initial assignment unless the employee has had the vaccination or if the antibody testing reveals immunity.

The vaccination must be performed by a licensed healthcare professional. Employees who decline the vaccination must sign a declination form.

The OSHA Blood Borne Pathogen Standards protect workers against the hazards from exposure to blood or other potentially infectious materials. Implementation of these standards not only will prevent Hepatitis B cases, but also will significantly reduce the risk of workers contracting AIDS, Hepatitis C, or other blood borne pathogens.

How does exposure occur?

Most common:

- Needle sticks.
- Cuts from other contaminated sharps (scalpels, broken glass, etc.).
- Contact with mucous membranes (for example: the eye, nose, mouth) or broken skin with contaminated blood.

Exposure Control Plan

Identifies jobs and tasks where occupational exposure to blood or other potentially infectious material occurs.

Describes how the employer will:

- Use engineering and work practice controls
- Ensure use of personal protective equipment (PPE)
- Provide training
- Provide medical surveillance
- Provide Hepatitis B vaccinations
- Use signs and labels

Engineering and work practice controls reduce employee exposure by either removing the hazard or isolating the worker. By altering how a task is performed, work practice controls reduce the

likelihood of exposure. For example, washing hands after removing gloves and avoiding food or smoking in work areas.

When occupational exposure remains after engineering and work practice controls are put in place, appropriate personal protective equipment must be used. This is specialized clothing or equipment worn by an employee for protection against infectious or hazardous materials. Examples include gloves, glasses, and face masks.

What to do if an exposure occurs?

- Wash exposed area with soap and water.
- Flush splashes to nose, mouth, or skin with water.
- Irrigate eyes with water or saline solution.
- Report the exposure to Risk Management.
- Direct the worker to a healthcare professional.

Biohazard Warning Labels

Warning labels are required on:

Containers of regulated waste.
Refrigerators and freezers containing blood and other potentially infectious materials.
Containers used to store, transport, or ship blood or other potentially infections materials.
Red bags or containers may be substituted for labels.

Control of odor and disease-causing bacteria is of vital importance to everyone. To help stop the spread of dangerous health threats, custodians must first understand the conditions that allow the bacteria to grow and multiply, and enable infections to spread.

Bacteria have certain basic needs that must be met if they are to live and reproduce. These needs are:

Food: Bacteria do not produce their own food supply. They require a food source or they will hibernate/die. This source can be in the form of organic matter, contaminated waste, or the human body.

Moisture: Bacteria need moisture to digest solid foods into liquid form at temperatures close to that of the human body (98.6 degrees Fahrenheit). High temperatures (above 180 degrees) will kill most bacteria. While hot temperatures will kill bacteria, extremely low temperatures will not.

Darkness: Darkness favors the development of bacteria. They become very active and multiply quickly. In such an environment, light is bacteria's worst enemy. When exposed to direct sunlight, bacteria become sluggish and die rapidly.

Odors in rest rooms, trash receptacles, and other areas are caused by bacteria that have begun to decompose organic matter. Before an area can be disinfected, it must be cleaned to remove the organic matter that bacteria is feeding on. After this matter is removed, the area should be

disinfected to prevent any possibility of bacteria re-growth and a recurrence of the offensive odor. Adequate contact time is critical in elimination of bacteria.

There are several ways of contracting an infection. The most common are infection by direct contact, infection by droplet, and Infection by air drafts.

The hands are common carriers of disease-producing germs when proper sanitation and protection methods are not followed. Toilet seats, water fountains, and items of personal contact can be potential carriers of pathogenic bacteria. All body fluids (blood, saliva, etc.) are potential contamination sources for disease-causing microorganisms such as HIV, hepatitis, tuberculosis, etc. Protect yourself from contact with such fluids through the use of rubber gloves.

The type of droplet that spreads infection may be caused by violent respiratory actions such as coughing or sneezing. These droplets often settle on floors, furniture, and other growth media.

3.1 Hazardous Material Identification System (HMIS)

The widespread use of chemicals and the need to protect employees from hazards led OSHA (Occupational Safety and Health Administration) to issue the first hazard communication standard in 1983. It requires that chemical manufacturers and importers evaluate all chemicals for hazards. The information concerning those hazards must be communicated to the employer and then passed onto the employee. The Hazard Communication Standard has three basic requirements:

The manufacturer must develop Safety Data Sheets (SDS) and container labels which must be sent to all users. Employers must develop a written hazard communication program and provide information and training to employees about the hazards of chemicals found in the workplace.

OSHA requires all chemicals in the workplace be labeled to provide a rapid indication of the occupational hazards associated with the chemicals used in the workplace. The labels must have the following information:

Name of chemical
Health risks
Flammability
Physical Hazard
Personal Protective Equipment Required

HMIS provides clear, recognizable information to employees by standardizing the presentation of chemical information. Assigned numeric ratings indicate the degree of hazard, and alphabetical codes designate appropriate Personal Protective Equipment (PPE) employees should wear while handling the material.

3.2 Safety Data Sheets (SDS)

OSHA requires communication to all workers of potential hazards from the chemicals used and stored at the site. This may include flammable, corrosive and other hazardous properties. The Safety Data Sheets for all the chemicals used on the job site must be accessible on demand.

A SDS contains basic information about a chemical to help work safely with that chemical or chemical product. It contains information on the properties and potential hazards of the material. The SDS provides four very important bits of information:

The name of the chemical
How it enters the body
What personal protective equipment to use when working with the chemical
What to do in case of emergency

The pH Scale

The pH scale indicates the acidity or alkalinity of a given substance. The pH scale runs from 0.05 to 14. Neutrality is represented by pH 7, and means that the substance being measured is neither acid nor base (alkaline). The range of pH from 7 - 14 represents the alkaline range. Moving downward from 7 - 0.05 is the acid range. The pH levels 0.05 and 14 are the strongest levels of acidity and alkalinity respectively.

i.e.: Neutral Cleaner is approximately 7 or 7.5 on the pH scale; floor finish is 9, so mopping your floors with a neutral cleaner (pH 7) will not damage your floor finish. However, should you mix bleach (pH 12) with your neutral cleaner to damp mop floors, this takes the pH of your floor cleaner over the pH of your floor finish and physically damages the floor.

3.3 Working Safely With Chemicals

Chemicals are a large component of everyday custodial duties. It is very important that they are used properly. Many of the cleaning chemicals used on the job are supplied in concentrated form and must be diluted with water before use. The exception is when Dispenser Solution Systems that automatically mix the chemical with water are used. Here are some ways to ensure proper use of custodial chemicals: (Note: Most chemicals have a shelf life of one year.)

Read labels on chemical containers.
Read SDS.
Label containers/spray bottles according to the HMIS and the SDS.
DO NOT MIX CHEMICALS.
Know the “pH” balance of the chemicals used.
Measure chemicals accurately.
Wear Personal Protective Equipment.
Follow procedures on all jobs. Don’t take shortcuts!
Keep containers closed when not in use.
Check containers regularly for leaks.

3.4 Personal Protective Equipment (PPE)

Employers must protect employees from workplace hazards such as machines, hazardous substances, and dangerous work procedures that can cause injury.

Use all feasible engineering and work practice controls to eliminate and reduce hazards.
Use appropriate Personal Protective Equipment (PPE) if these controls do not eliminate the hazards.
Remember, PPE is the last level of control!

Examples of PPE:

Eyes – safety glasses/goggles
Face – face shields
Feet – safety shoes
Hands and arms – rubber gloves
Hearing – earplugs, earmuffs

Training

Employees required to use PPE must be trained to know at least the following:

When PPE is necessary.
What type of PPE is necessary.
How to properly put on, take off, adjust, and wear PPE.
Limitations of the PPE.
Proper care, maintenance, useful life and disposal of PPE.

3.5 Fire Extinguishers

Different types of fire extinguishers are designed to fight different types of fires. The most common types of extinguishers are: Water (APW), Carbon Dioxide (CO2), Dry Chemical (ABC, BC, and D).

Water (APW) Extinguishers are designed for Class A (wood, paper, cloth) fires only.

CO2s are designed for Class B and C (flammable liquid and electrical) fires only.

Dry Chemical Extinguishers come in a variety of types.

You may see extinguishers labeled like this:

It's easy to remember how to use a fire extinguisher if you can remember the acronym **PASS**.

Pull the pin. This will allow you to discharge the extinguisher.

Aim at the base of the fire. If you aim at the flames (which is frequently the temptation), the extinguishing agent will fly right through and do no good. You want to hit the base.

Squeeze the top handle or lever. This depresses a button that releases the pressurized extinguishing agent in the extinguisher.

Sweep from side to side until the fire is completely out. Start using the extinguisher from a safe distance away, and then move forward. Once the fire is out, keep an eye on the area in case it ignites again.

4. GENERAL SAFETY

4.1 General Safety Tips

- Make safety the first consideration in every situation.
- When picking up a load, evaluate whether or not you need help or special equipment. Do not lift a load if considered unsafe.
- Keep your work area clean and free of loose objects, stumbling or slipping hazards, etc.
- Be aware of walking surfaces and their condition. Extra care may be required to prevent an accident.
- Do not reach too high for something that may fall on you. Use a small set of steps, a ladder, or ask for help if you need it. If a ladder is used, be sure it is well secured.
- Use a proper height ladder or stool (not a box, desk or chair) to reach places and avoid, if possible, carrying material up or down ladders.
- Never leave an unsafe condition unguarded or unmarked, even temporarily.
- Always post “wet floor” signs when using a liquid floor cleaning method.
- Before using any chemical make sure you have read the SDS and know how to use, store and dispose of the chemical.
- Never store chemicals in unlabeled or incorrectly labeled containers.
- Always check hand and power tools and electrical cords before using. Never use a tool or cord that is damaged or defective.
- Never leave tools or equipment lying on the floor in walk paths or exits.
- Get first aid for every scratch, cut, and burn, no matter how small. Untreated minor injuries may develop into serious injuries.
- Every accident or injury, no matter how small, must be reported to your supervisor immediately. He/she will then report the accident or injury to Risk Management if appropriate.
- Do not attempt to operate equipment if you do not know how.

- Make sure you know where the fire extinguishers are located and that they fully charged and operational.
- Emergency exits must be kept clear at all times.
- Never stack anything in front of fire extinguishers, electrical boxes, or fire doors.
- Never pour flammable liquids down drains or sewers.
- Dispose of all flammable waste rags in metal containers with lids in an approved area.
- Always wear comfortable and adequate clothing on the job. This not only includes well-fitting clothing, but adequate shoes to protect your feet from hazardous jobs.
- Wear adequate shoes slip resistant soles and with full protection of the heel and toes. Never wear shoes with worn heels or shoes that are open.

4.2 Safe Lifting Rules

- Size up the load. Do not attempt to lift a load alone if you have any doubt of your ability to lift it.
- Always make sure your footing is secure.
- Place feet close to the base of the object to be lifted.
- Get a good grip on the load.
- Bend your knees; keep your back straight.
- Keep the load close to the body.
- Be sure you can see past the load.
- In team lifting, cooperate with your partner if carrying a long object.
- When putting down a load, lifting procedures still apply.
- Do not attempt to use hand trucks to move objects weighing in excess of 500 pounds.
- Before moving a load, make sure your intended pathway is clear. Be aware of potential conflicts such as class changes, lunch periods, etc.
- When carrying, turn your whole body, including your feet. Never twist your shoulders and hips before moving your feet.

4.3 Ladder Safety

- All types of ladders are available on the job site for your use. There is no excuse for using a makeshift means of access to a work area.
- Broken or damaged ladders must not be used. Repair or dispose of them immediately. Ladders to be repaired must be tagged “DO NOT USE.”
- Ladders should not be placed against moveable objects.
- The base of the ladder must be set back a safe distance from the vertical — approximately one-fourth of the working length of the ladder.
- The areas around the top and base of ladders must be free of tripping hazards such as loose materials, trash, and electrical cords.
- Barricades or guards must protect ladders that project into passageways or doorways where they could be struck by personnel or moving equipment.
- You must face the ladder at all times when ascending or descending.

- Be sure your shoes are free of mud, grease, or other substances which could cause you to slip or fall.
- Always move the ladder to avoid over-reaching.
- Fully open stepladders to permit the spreader to lock.

4.4 Electrical Safety

- Always check electrical cords, tools or equipment carefully before using. Damaged/defective equipment should be pulled from service and repaired immediately.
- All outlets within five feet of a water source must be equipped with a ground fault interrupter. Never work on electrical problems in a wet environment.
- Avoid wearing excessive jewelry (rings, bracelets, etc.) when performing electrical tasks.
- Main service panel rooms or areas should be kept free of combustible items such as wood, paper, paint or flammable liquids.

4.5 Equipment

- All electrical outlets should be of the 3-wire grounded type.
- All electrical equipment should have the Underwriters Laboratories (UL) designation label. It should also have 3-wire ground cords and be otherwise properly insulated.
- 2-wire plug adapters should not be used.
- Only heavy duty grounded extension cords should be used for temporary wiring.
- All circuit breakers should be numbered and identified as to the location served. Circuit breaker switches should not be taped in the "ON" position.
- Electrical rooms should be kept locked at all times with access by authorized personnel only. All electrical boxes outside the secured area should be kept locked.
- There should be no storage of combustibles/flammables in the electrical room, and access to all electrical panels must be kept free of obstructions.
- Power cords should be kept in good condition – never worn, broken, improperly repaired or patched.
- Any equipment that sparks, stalls, or runs hot should be repaired or replaced.

4.6 Fall Safety

Falls are one of the most common types of accidents. Preventing a fall and injury is everyone's responsibility.

- When it is necessary to climb – use a ladder – not a chair, stool or desk.
- When working with floor stripper, wear safety shoes with stripper grippers attached.
- Use care when working on stairways. Keep your balance.
- Use caution when working so as not to trip over your equipment — mop bucket, vacuum cleaner, and other tools.

5. BASIC CLEANING PROCEDURES

5.1 Floor Care

How to Maintain a Carpeted Floor

Maintaining a carpeted floor is different from maintaining a hard surface floor. The techniques used on a day-to-day basis are naturally different. As dust mopping is always the starting point in hard floor care, vacuuming is always the beginning for any cleaning activity on a carpeted floor. The exception is cleaning spills or stains immediately after occurrences.

Whether or not an area requires daily vacuuming depends on the intensity of its use. Two factors that have a bearing on the frequency of vacuuming are the weather and the location of the carpeted area in relation to the entrance of the building.

Vacuuming Carpets and Upholstery

Daily vacuuming is usually performed with an upright vacuum cleaner. While vacuuming, check to see if the cleaner is putting dust and dirt back into the air. If it is, the vacuum cleaner needs to be cleaned, repaired, or have its disposable bag replaced.

Only heavy-duty extension cords can be used when the cord to the vacuum cleaner is not long enough. Three-prong plugs must be used on the electrical cord in order to meet Occupational Safety and Health Administration (OSHA) standards. Don't use the vacuum if the ground prong has been broken or removed.

Traffic areas around desks and chairs should be vacuumed daily. Areas not walked on should be vacuumed weekly. Give careful attention to the edges of carpets along the walls, next to the file cabinets, and around furniture. These areas build up dust quickly.

Once a month (more often if needed) use a tank vacuum with hose and crevice tool to clean the edges of the carpet. At the same time, vacuum upholstered chairs and couches using a furniture attachment. Clean spots from carpet as needed.

Vacuum Selection and Maintenance

- Empty or replace bags as needed. The more dirt in the bag, the less efficient the vacuum will be.
- Clean bags/brushes and change filters/belts as needed.
- Periodically, vacuum air vents and grills to remove dust. Backpack vacuums are handy for this and other high places.

How to Vacuum

Inspect the carpet before vacuuming. Pick up papers, pins, matches, and anything that could damage or clog the vacuum or hose. The best method is to vacuum the carpet lengthwise against the nap, and then return backwards with the nap. Continue this procedure until the cleaning is finished.

A word of caution about vacuum cleaners should be mentioned. During the past two decades, much improvement has been made in the design of hand-held and backpack vacuums. These are designed to be carried on the operator's back or waist, or small enough to be carried in the custodian's hand. Backpack vacuums are primarily designed for vacuuming draperies, curtains, blinds, stair treads, small landings, and so forth. Some of the more powerful models can be used for vacuuming carpet and vinyl floors.

In order to keep floor coverings clean on a regular basis, use backpack and commercial upright vacuum cleaners equipped with micro-allergen filtration systems. These vacuums serve as air purification systems that actually remove 100% of dust mites and claim to remove as much as 99.8% of dust and air particulate.

In order for your vacuum to perform its best, you should always:

- Keep the machine and accessories clean and in good working condition.
- Change belts, bags, and filters as recommended by the manufacturer.
- Replace or adjust cleaning brushes when worn.
- Store the machine in a dry area.
- Study and follow the owner's manual.

Spot and Stain Removal

Other factors that must be given daily consideration are spots and stains. Even though an area is not vacuumed daily, but receives use, a good custodian will check the carpet for spots and stains while doing other duties in the area.

Spots or stains should be removed as soon as they occur. If that is not possible, then they should be removed as soon as they are discovered. The longer a spot or stain remains on the fiber of the carpet the harder it is to remove. Vacuum the area if it's dry. If it's wet or damp, use an absorbent cloth or paper towel on the surface and apply pressure. Allow the material to absorb the wetness by only applying pressure. When the excess moisture has been removed, apply the proper solution to the area. Do not rub with a circular motion! Agitate the solution by working from the outer edge of the spot to the center. This prevents the stain from spreading over a larger area. Using a spoon on the edges of the stain works well to bring up the spot. Ordinary soiling that occurs over one or two years of use will be reduced by shampooing. This is particularly true if a program of stain removal is carried out on a consistent basis.

Never use a stain remover or chemical on a carpet until it has been tested on the carpet in an out-of-the-way place, or on a surplus piece of the carpet. This eliminates the need of having to buy a new carpet if the chemical harms it in some manner. This procedure is mandatory every time a

carpet is shampooed unless the same chemicals have been used on the particular carpet before and no harm has resulted. A different carpet or a different chemical requires a test patch.

Carpeting is an expensive floor covering. It costs a great deal to buy and have installed. Naturally, the owner wants it to last as long as possible. The longer it lasts, and the better it looks, the better it is for the operator. To help accomplish this, establish a good program of carpet care and follow through.

Fundamentally, the program should consist of vacuuming on as needed schedule, and shampooing only when required. The steam or hot water extraction procedure should only be used as a last resort.

Water Extraction Methods

Note: Do not use water extraction during the summer restoration months.

Do not overuse water or liquids of any kind. Put moisture on a carpet only when nothing else will clean it. Steam or hot water machines have a tendency to over wet a carpet — a situation to avoid. The very nature of the procedure introduces excess water into the carpet, requiring a careful operator who can minimize this.

Improper shampooing leaves a lot of the cleaning agent in the rug fibers and this will catch and hold dust and grime that dulls the carpet's appearance. Carpet care should be done carefully and cautiously with personal involvement in the process and results. Avoid over wetting surfaces during cleaning, by using a double pass method. Also avoid using too much detergent.

Use air movers to reduce drying time.

Carpet Odors

Odors are another concern of carpet care. The process for removal of odors depends on their cause and how they can be treated. The most common cause of odors is spills. Odor is either produced by the spilled material, or it can develop from the bacteria in the spill. Complete removal can be expected if the spilled material does not penetrate deeply into the fibers, and if thorough washing methods are used. The deeper the spill soaks into the fibers, the more difficult it becomes to completely remove the odor-causing bacteria. It is almost impossible to remove an odor producing stain from the backing fiber of carpeting.

Some odors can never really be removed successfully and the most practical solution is to replace the affected area of the carpet with a new piece. Odors caused by mildew, although removed, will sometimes recur with new mildew growth. The use of a good bacteriostatic product will help minimize the possibility of mildew growth.

Spots and Stains — Additional Information

Remove as much of the excess spillage as possible using a white absorbent cloth, paper towel, or tissue. The longer the spill is allowed to remain, the more difficult it will be to remove.

Always pre-test spotting formulas on an inconspicuous area of the carpeting to see if there is an adverse effect on the dyes.
Apply a cleaner sparingly, and blot up. Do not rub. Use a clean, white, absorbent towel or cloth. Work from the outer edge of the spot in towards the center. Avoid excessive agitation as it may result in unsightly distortion.

The on-sight custodian can prepare a solution to treat most stains. It is made by mixing one (1) ounce detergent with one (1) ounce of white vinegar, and one (1) quart of lukewarm water. The solution can be applied with a hand spray bottle or a damp, clean cloth. If a damp cloth is used, allow the cloth to absorb as much of the solution as possible and follow the procedure given above. If the spray applies the solution, follow the given procedure after allowing time for the solution to work. The solution will work for animal urine, beverages (soft and alcoholic), candy, chocolate, coffee, egg, excrement, fruit stains, gravy, ice cream, ink (washable), milk, mustard, salad dressing, sauces, starches, sugars, and vomit.

After treatment, allow the carpet to dry. Re-apply the solution if required. Again, allow the carpet to dry and brush the pile gently.

Vinyl Tile Floors

Immaculate, attractive floors are important for public relations. Even though all other parts of the building have eye appeal, the effect is lost unless the floors are also attractive and well maintained.

Dry Mopping Procedure (Dust Mopping)

An effective custodian is observant. If he sees gum or other foreign substances in front of the mop, he removes them. The custodian then proceeds with the sweeping until the area is finished.

As mentioned earlier, it is preferable to shake the accumulated dust from the mop when a room is finished. If necessary in order to do a good job, shake the mop more often than once. Shake 3" from floors or brush the mop just inside the door or in the hallway, if it has to be done before the room is finished. The best place to perform this operation is near the door where all the dust and particles can be picked up and deposited into the trash bag just before moving on to another room. A professional custodian never takes his dust mop outdoors to shake it out.

A non-oily treatment is applied to the strings of the dust mop before it is used. Too little treatment will not pick up the dust and too much will put streaks on the floor. A good rule for new cotton mops is one ounce of treatment for every six inches of length. For example, an 18-inch mop would require three ounces of mop treatment. Another suggestion is to spray the mop treatment on the strings of the mop rather than pouring it. You get better penetration and distribution when a spray is used. After treating the mop, fold all the strings toward the center and then roll it tightly into a ball. At this point put a strong rubber band around it and place it in a container with a tight cover. Allow the mop to cure in the container at least one week before using it.

Damp Mopping Procedure

When you mop, stand with your feet about fifteen inches apart. The mop should be swung from left to right and from right to left in front of you. Curve the ends of the stroke to make a figure eight. Allow your body to move with the rhythm of the stroke to avoid fatigue. As you mop, turn the mop over occasionally so both sides will be used. Damp mopping is used to remove light surface soil.

1. Dust mop, vacuum (back pack vacuum) the floor. Remove gum or other foreign spots with a putty knife.
2. Using wringer on mop bucket, gently squeeze the mop to remove excess water.
3. Begin mopping at a point farthest from the door. Working your way towards the exit door, use a figure eight motion to mop. Overlap areas to prevent streaks and border marks.
4. Wipe off moisture that may have splashed against the baseboard or furniture.
5. Move to the next room and repeat the process.
6. When all mopping is completed, or at the end of the work shift, clean up the tools. Wash the mops in the custodial sink and hang them up to dry. Wash the pails, rinse them out with clean water, and allow drying.

Note: If at any time during the mopping procedure either bucket of water shows signs of being dirty, replace the water at once. It is not possible to clean a floor well if the solution water or rinse water is dirty. If this is not done, the whole mopping operation has been wasted and will need to be done over.

Always dilute mopping solution according to the instructions on the label of the product you are using. Never guess the proper amount because too much can damage the floor and too little will not clean it properly.

Stripping Floors

Floor finishes gradually become worn from use. When it becomes necessary to renew the floor's appearance, the old finish must be removed before a new coating can be applied. Otherwise, the old and new finishes will build up. In the least used places, the buildup will discolor the floor.

The old finish and the accompanying accumulation of dirt are removed in two ways during floor stripping:

1. By the chemical action of the stripper.
2. By the physical action of your scrubbing machine as it moves back and forth over the floor.

A Checklist of Equipment and Materials for Floor Stripping

To strip a floor properly, you must have certain materials and items of equipment. The following checklist can serve as a guide.

- 1 dust mop
- 1 putty knife
- 1 counter brush
- 1 dust pan
- 1 trash cart
- 2 mop pails
- Stripper Grippers
- 1 wringer
- 3 24 oz. mops
- 2 "Wet Floor" signs
- 1 utility buffer with brush or pad holder (175-300 rpm)
- 1 stripping pad, same size as the machine
- 2 synthetic hand pads
- 1 wet vacuum and necessary attachments

Procedure for Stripping Floors

1. Move all furniture from the room or area to be stripped. It is too time consuming to move furniture from side to side of room when stripping and refinishing.

2. Dust the area or room. Dust down the ceilings and top of walls. Spot clean walls where needed.

3. Remove gum and other substances from the surface with a putty knife, then dust mop the floor. Sweep up accumulated soil with a counter brush and dustpan.

4. Prepare the stripping solution. Fill the two buckets three-fourths full (depending on floor size) with water. This will be approximately 6 gallons of water in each pail. In the pail of stripping solution, add stripping chemical according to the manufacturer's instructions. Place a wringer on the rinse pail.

5. Move the mopping equipment into the work area. While standing behind the buckets, place the mops in the buckets against the far side, and push straight ahead.

6. Start the stripping operation. Begin working at the far corner of the room or the corner opposite the exit or door from which you plan to leave. Use mop "1" for the stripping solution. Never use it in any other pail. To fill the mop, agitate it in the bucket of solution, then lift the mop out of the solution, hold it over the bucket, and allow the excess solution to drain off the mop. Work in small sections at first. If the area to be cleaned is completely open and all goes well, you may increase the size of the section. Apply the stripping solution to the floor. With the first strikes of the mop, cut in the section to be cleaned. To avoid soaking the baseboard, make the first

stroke parallel to the baseboard and about 12 inches away from it, then carefully make the second stroke along the baseboard itself.

7. Mop the section with side-to-side strokes. Start at the far wall from the buckets and walk backward while mopping from side-to-side. Use a rhythmic stroke whenever possible, and be sure to overlap strokes. Technique is important. Stand with your feet 18 to 24 inches apart, one foot slightly behind the other, and keep your back straight. Keep mop in continuous motion by making a "C" curve at the end of each stroke. To reverse direction, shift body weight from foot to foot and help swing the mop. Always pass the mop head close to your feet and keep your elbows close to your body. Step backward as the mop approaches your forward foot. Keep the heel of the mop on the floor and strands well spread.

8. Turn the mop over occasionally. For best results, the mop should be turned two or three times in between applications of stripping solution. Turn it at the stroke end away from baseboards or furniture. Instead of making a "C" curve, turn the mop, lift it, and loop or twist it over the strands.

9. Allow stripper time to work. After the stripping solution has been applied evenly over the floor, allow it to set for at least 5 minutes. During that period, you will notice the finish being re-emulsified and floating to the surface. In some areas, where the old finish is the heaviest or thickest, the solution may become completely absorbed. It may start turning white and becoming dry. Re-wet these areas with more stripping solution. Keep the solution spread evenly over the floor during this waiting period. The floor must stay wet with solution at all times.

10. Prepare the floor machine. Tilt the machine back on its wheels until the handle rests on the floor. Fit the scrubbing brush or stripping pad to the drive unit of the machine. Turn the brush or pad sharply clockwise to secure it against the lugs. Stand the machine up and adjust the handle so it can be held comfortably just below the waist. Caution: Make sure the switch is off before plugging in the machine.

11. Scrub the floor with the machine. Start at the far end of the area covered with stripping solution (where the solution was first laid) and work backward to the dry area. To help you establish control of the machine's movements, the beginning stroke should be started with the machine directly in front of you. A 6-foot stroke is the least tiring. Move the machine slowly from side to side. Do not dig the pad into the floor or change direction quickly. Most machines rotate counter-clockwise, so you can move the machine to the right by raising the handle slightly and move it to the left by lowering the handle slightly. To achieve a uniformly clean floor, you must not miss any areas with the machine. For this reason, you should follow a row of tile with one edge of your machine as you move across the floor, and then return again over the same path. Work slowly and give the brush or pad a chance to rotate as many times as possible to scrub all the soil from the floor. Take a step back about 3 inches less than the width of your floor machine. Select a new row of tile to follow and proceed as before. Repeat this process until the area covered with solution is completely scrubbed. On very difficult jobs, you should go over the floor again in

the opposite direction. This will help clean any hills or valleys caused by uneven floors. Black marks or hard to remove spots may be eliminated by heeling the machine over a spot using the edge of the brush or pad. To help eliminate any lap marks caused by the motion of the machine, work the edges in a parallel motion with the machine. This will also give you extra scrubbing time over the edges where the finish has built up. A black pad can be used to scrub in the corners and near the baseboard (using either the heel of your shoe or a doodlebug) where the machine cannot reach.
Caution: Do not allow the stripping solution to dry on the floor. If an area seems to be drying, apply more solution to loosen it up and agitate it with the solution mop. This is very important. If the solution is not kept wet until it is picked up with the vacuum, it will re-adhere to the floor, and you will have to rescrub to remove it. If you do not rescrub, the dried stripping solution and old finish will show up beneath the new finish as a discolored area when it is applied.

12. Clean the baseboards and corners. A co-worker can do this while you are operating the machine.

13. Remove the floor machine, cords, and pads from the area just scrubbed. If you are working in a three-person crew, one worker may proceed to take the machine to another section and start the process over again on another floor.

14. Roll the water pickup vacuum into the area that has just been scrubbed, and attach the hose, handle, and squeegee. Start working forward into the solution from the dry floor area. By moving in this manner, you will keep pulling the machine behind you, rather than backing into it and tripping or getting tangled in the power cord. Operate the squeegee in 3 or 4 strokes. Lower the handle slightly to go forward and raise the handle slightly to pull back.
Note: All soiled water is deposited into the vacuum tank. Both your cleaning solution and your rinse solution remain unsoiled, and you should be able to use them on the next section.

15. Rinse the floor. Move the rinse bucket onto the cleaned section and apply a liberal rinse of clean, warm water. Use mop "2" for this operation and do not use it in any other pail at any time. Apply the rinse in the same manner that you applied the cleaning solution. Agitate with the mop in several directions. This motion will take care of any low spots and missed areas. Be sure to rinse the baseboards.

16. Pick up the rinse. Use the water pick up vacuum to pick up the rinse in the same manner you picked up the cleaning solution. Wipe dry all baseboards and bottoms of equipment and doors. Remove the vacuum equipment from the area. Be sure it is completely out of the way of the next operation.

17. Damp mop the area cleaned to remove footprints, cord marks, and any small amounts of water missed by the vacuum. Before starting, be sure to agitate the rinse mop in the rinse bucket several times; then wring it dry. Shake the mop to loosen the strands.

18. Inspect the floor. Check for uniformity of color and complete the finish removal. Any imperfections should be corrected at this time. The completion should take only a few minutes. If you have to redo the job later because of imperfections left uncorrected, the work could take hours.

19. Return the equipment to the storage area and clean it all. Wash off both pails and the wringer then wipe them dry. Clean both mop heads and hang them up to dry or send them to the laundry so they will not sour and smell. Wipe power cords and machine housings. Wash out the brush and floor pads and hang them up to dry. Rinse out the vacuum tank, motor stand and shut-off float, squeegee, and hose. Hang up the hose to drain. Report any malfunction of machines so they can be repaired and ready for operation the next time you need them. Now the floor is ready for new floor finish to be laid.

When not in use under scrubbing conditions, the pad and block should be removed and placed where they cannot drip and stain the floor. Mops should also be replaced in the mop pail and not left sitting on the floor. It is never a good practice to leave water or solution on any floor longer than ten minutes. A good floor program is an extremely important part of housekeeping. This is a prime example of the need to "plan your work and work your plan."

Floor Finish Procedure

Floor finish should be applied in several thin coats rather than one or two heavy coats. Finish applied in thin coats dries more rapidly, more thoroughly, and more evenly. Those who insist on using heavier and fewer coats often end up using more finish, and the work is poor quality. They are wasting labor power and creating headaches for everyone down the line. Floor finishes will simply not dry properly when applied too heavy. Floor finishes will run, pile and remain liquid for a long time when applied in heavy, thick coats. If a finish does not dry, it will be sticky and dirt will imbed in the finish making it mandatory to remove sooner.

Most people believe that a shiny floor is a slippery floor. Many years ago this was true. However, with manmade finishes and advances in floor finish application, today's floor finishes have slip resistance built right into them. Consequently, they can shine without being slippery. Shiny floors are often blamed for falls when in reality other factors are the cause. Some of these are: faulty shoes, the amount of moisture on the floor, or other things not directly related to the shiny appearance.

After the floor has been stripped, the floor finish procedure is as follows:

1. Pour a small amount of floor finish in a clean mop pail or a floor finish tray. Use a clean wringer. A plastic bucket and wringer is preferable to metal. Galvanized metal buckets should never be used for waxing floors as the metal will break down the floor finish and make it unsuitable for use.

2. Use a rayon mop for laying the finish. Cotton mops have a tendency to leave "lint" behind and absorb the floor finish. Rayon mops do not leave any lint and the finish flows freely from the mop head. Wet the mop with clean water and wring it as dry as possible. Do not use hot water. Room temperature is best.
3. Dip the mop into the floor finish. Wring it gently to remove excess finish. Run the mop along the edges of the floor as in damp mopping, being careful not to get any finish on the wall or baseboard. Apply finish evenly to floor using a figure eight motion. If the finish color shows as you apply it, it's too heavy. Avoid overlaps.
4. Allow drying. Depending on the weather and the temperature of building, the co-polymers should dry thoroughly in about forty-five minutes or less.
5. Apply a second thin coat in the same way, but in a different (across) direction. Be sure to stay away from the baseboard the width of the flat mop. Allow the second coat to dry thoroughly.
6. Apply a third coat in the same manner as the other two. Normally three coats of floor finish are enough for storage areas. Areas of heavy traffic such as classrooms/hallways require four or five coats. This decision is a policy matter.
7. Allow each coat to dry thoroughly.
8. When the task is finished, take tools, supplies, and equipment to the custodial closet or storage area. Clean the finish mop with hot water and rinse out well with cold water. Clean the wringer and pail. Hang the finish mop to dry. Clean and hang the dust mop.

Never pour leftover finish back into the original container if it's not empty. Bacteria has had a chance to become active in the finish exposed to the air and will ruin the remainder of the finish in the container. Pour used finish into a separate container that can be covered tightly.

5.2 Dusting

One of the most important phases of housekeeping is to have a good dusting program. Dust particles are so fine that the slightest disturbance of the air scatters them in all directions. Dust is the carrier of highly infectious and contagious germs. Many people have dust allergies that make it difficult for them to work in a dusty location. Dust particles also cause excessive wear to the working parts of machines whether they are adding machines, calculators, computers, or similar electronic devices.

Get in the habit of carrying your dusting supplies with you. They are a silent reminder that dusting should be done sometime during the shift.

Dusters and Dust Cloths

Dusters and dust cloths each have their own advantages in certain parts of the cleaning process. To use a lamb's wool duster or synthetic duster is a personal choice. Most furniture today has a factory seal that only requires damp cleaning with a cloth rag.

There is an advantage to using a duster on a desktop with papers. The dusting may be done without moving anything. Also hard-to-reach places may be dusted more easily with a duster than with a dust cloth. Wall picture frames, chalkboard frames, bulletin board frames and

desktop items with small surfaces that catch dust may be more easily dusted than with a dust cloth. When not in use, a lamb's wool duster or synthetic duster should be covered with a duster protector to keep it clean and dry. This will also help to maintain its original shape and will protect the feathers or fibers from water, dirt, and chemical damage.

5.3 How to Clean Drinking Fountains

Drinking fountains are made of the same materials bathroom fixtures are. Cleaning should be done the same way except that it is mandatory to use a different set of cloths and buckets for restrooms and drinking fountains. To eliminate the possibility of accidentally using tools intended for restroom use on fountains, many custodians' clean fountains by using smaller cloths, a smaller bucket, and a hand spray bottle to apply the disinfectant cleaner. The spray penetrates and cleans more thoroughly and quickly. Bubblers and mouth shields should always receive close attention. Check the flow of water into the fountain. Make sure it is not too high or low; not enough flow spreads infections. Side vents should be checked to insure they are free of dust and dirt.

If fountains are not kept clean, they become a dangerous source of transmission of respiratory and oral diseases. Daily, or more frequent, cleaning of drinking fountains is an absolute must.

5.4 How to Clean Light Fixtures

The procedure for cleaning fluorescent lights is:

1. Release the catches on each end of the plastic casing.
2. Slowly let casing down and dust the inner side.
3. If bulbs need to be replaced, do so at this time.
4. Replace casing and catches that hold it to light casing.

5.5 How to Wash Walls

Taking care of walls is based on regular cleaning. Use a system that will postpone the necessity of a major effort to keep them looking good. Institute a program of dusting the top of the walls with a clean dust mop and spot cleaning lower walls as needed.

A good scheduling of "as required" wall washing includes it as an ongoing operation during the entire year. The reason for this is similar to immediate action on carpet spotting and staining, to prevent a condition from becoming chronic. Also, a scheduled item like this can be handled many times without the additional equipment and labor that a full-scale operation requires.

Cleaning Procedure for Spot Washing Walls

The equipment required is very simple – a pail, a cloth, a hand spray bottle.

Spray pressure can break surface tension more quickly than rubbing and does not do the damage of rubbing and abrasive scrub pads. Spray a spot or area, allow some time for the sprayed solution to work, and then use the clean, wet cloth to wipe it down. Approximately 95% of the spots that happen to a wall surface will clean up without all the elbow grease and sweaty effort usually expended on wall cleaning. Always rinse the cloth in the pail of clean rinse water. Then squeeze it as dry as possible before using it to wipe the spray spot.

5.6 How to Clean Windows

All door glass is an area of daily concern, particularly entrance doors. Window glass in general is of less concern unless it is used in a display area, such as a trophy case. If it is used in display, it becomes an area of concern, but not usually on a daily basis. Door glass and mirrors in restrooms can be handled with a glass cleaner and paper towels.

Not only are dirty windows an eyesore but they also reduce the amount of light that can come into a room from the outside. Since the accumulation is gradual, so is the loss of light. Clean windows are very apparent to anyone entering a room. This is especially true when the window area is large. Dirty windows are just as apparent to the person from the outside, particularly if the accumulation has been allowed to build up on the inside. Dirty windows create a poor public image for the custodian and the person for whom he works.

Whenever possible (when the glass surface is large enough) use the squeegee to wash windows. Once a cleaning technician masters the squeegee technique, it becomes the fastest and easiest method to wash windows. If the window area is made of small panes that hold back the use of the squeegee, the hand spray bottle filled with window washing solution and absorbent paper towels works best.

Regardless, whether a squeegee or a hand spray bottle and paper towels are used, always be certain that excess moisture is removed from the window frame and sill before leaving the window as completed. The water and chemical will damage the frame.

5.7 Cleaning Radiators, Heating Units and Air Conditioners

Dust off the unit from top to bottom. Use the radiator brush or vacuum attachment to reach hard to get areas. If disassembly is needed for interior cleaning or filter removal, see your supervisor or request assistance from the maintenance department via a work order.

Note: Be sure to clean the areas around the air conditioner. Look at the grill portion of the unit as you are cleaning the case. If it shows dust or lint, the filter of the air conditioner is dirty and the maintenance department should be notified to clean or change the filter.

5.8 How to Clean Venetian Blinds

Venetian blinds are an attractive means for blocking or controlling the passage of light and sunshine through windows.

The equipment needed to dust Venetian blinds includes one or more treated dust cloths, a lamb's wool duster, and a ladder if necessary.

1. Extend the blinds all the way.
2. Tilt the slats up (or to one side if they are vertical) and dust lightly with a cloth or duster.
3. Tilt the slats down (or to the opposite side if they are vertical) and dust the other side lightly with a cloth or duster.
4. For individual stains on any given slat, spray with window cleaner, wait 1 to 2 minutes, and wipe with a soft cloth. If your blinds are cloth, test this on a hidden area first.

Note: The finger type Venetian blind cleaners that are available do not do a good job and should be avoided. Custodians are reporting great results by using a Swiffer on a 3 or 4-foot handle. The Swiffer does a great job of holding the dust it removes and the handle eliminates the need for a ladder. This has proven to be a very efficient method of dusting Venetian blinds.

5.9 The Custodial Closet

Each area of the school that needs to be cleaned has a custodial closet in the general area. This closet generally has shelves for storing cleaning supplies, space for cleaning equipment, and a sink. When you need supplies, inform the manager.

The custodial closet should always be kept neat, clean, and orderly. The quality of its appearance will reflect on the work you do and your image as a true professional. It is also your responsibility to help care for, clean, and store the various items of equipment used in your daily work.

A custodial cart is used to carry equipment, materials, and supplies necessary for basic cleaning jobs that are performed on a regular or daily basis. It provides several advantages for the custodial worker:

- A custodial cart can help save time and energy, because frequently used supplies and equipment can be kept close to where the cleaning work is being performed.
- Having the equipment and supplies on the cart is safer than having them on the floor where they can become a safety hazard or accidentally get left behind.
- Many custodial workers place a large plastic bag in their canvas/plastic bag to keep it clean and to enable them to remove the trash from the cart to the dumpster.

Whether the cart is a canvas truck bag trash container or a plastic Rubbermaid cart, the trash collected must be emptied, the bag and/or shelving on the cart must be cleaned and the cart restocked for the next day.

Tips on Caring For Basic Items of Equipment

Abrasive Scratch Pad: Wash the pad in clean water. Rinse it and shake out excess water. Store the pad in a dry place.

Brushes: A custodian must work with brooms and numerous types of brushes. These include corner, toilet bowl, counter, floor machine, and hand scrub brushes. When cleaning brushes, follow these general rules:

- Rinse the brush out in clear, cold water. If the brush is dirty, wash it out in lukewarm cleaning solution and rinse with clean water.
- Let the brush dry with bristles straight.
- Comb out the bristles occasionally to remove debris and tangles.
- Do not store on bristles, as this will cause bristles to be bent and warped.
- Always hang a broom when it is not in use. Never stand a broom on its straws.
- When you use a broom, rotate it frequently so it will wear evenly.

Buckets and Wringers: Keep the equipment in good repair. Use a bucket and wringer of the proper size for the mop. Do not use force on the wringer lever. Use only enough hand pressure on the lever to wring out the mop. Remove any loose mop head yarn, string, or foreign matter that becomes tangled in the wringer or the wheels of the bucket. Wash and scrub all surfaces of the bucket and wringer with disinfectant detergent. Rinse with warm water and wipe dry. Keep the wringer in the "release" position when it is not being used. The wheels on the bucket should be lightly oiled (WD40) as needed.

Cleaning Rags: Cleaning rags should be rinsed frequently during use and laundered daily. Wring each rag free of excess water. Never leave dirty cleaning rags lying around. They could carry disease and are a safety hazard.

Custodial Cart: Keep the cart's shelves clean and neatly stocked with all needed supplies and equipment. See that the rest of the cart is kept clean at all times. Wipe it regularly, using a disinfectant synthetic detergent.

Dust Mops: Remove loose soil by sweeping out with broom or counter brush. Replace as needed.

Dustpan: Take particular care of the front edge of a dustpan. Careless handling or laying heavy objects on the pan can cause the edges to become bent or ragged. This will reduce the pan's efficiency when picking up sweepings. After use, wash the dustpan with a detergent solution and wipe dry. Disinfect the dustpan from time to time with a disinfectant detergent. Hang the dustpan so that it will not become bent or damaged.

Floor Finish Mops: After use, wash out all floor finish with clear water. Never use any chemicals to clean floor finish mop.

Measuring Cup: Rinse the cup with water immediately after use, until it is free of detergent or other cleaning chemical. Dry and store the cup so that it will not be damaged or misplaced.

Plastic Spray Bottle: Each time you finish using a plastic spray bottle, clean its exterior with a damp rag. Otherwise, unsightly and possibly dangerous residues will build up. The efficiency of the spray bottle can also be reduced by a residue buildup. Store the spray bottle in a clean, dry place. A trigger-type bottle must be taken apart regularly and cleaned to avoid clogging. Label each spray bottle according to the Prince William County Hazardous Communication Standards.

Putty Knife or Scraping Knife: After each day's use, wipe the putty knife or scraping knife to remove moisture or debris. Store these tools in a cool, dry, and safe place. Use the putty knife or scraping knife only for the purpose specified.

Pails: Clean pails thoroughly after each use. Do not allow a cleaning solution to remain in a pail overnight or longer when it is not being used.

Wet Mops: After use, wash in disinfectant detergent solution. Rinse well, this helps prevent souring and growth of bacteria.

6. INDOOR AIR QUALITY (IAQ)

Sick Buildings

The leading cause of sick building syndrome is poor indoor air quality!

Health Effects of Poor Indoor Air Quality

Coughing
Decreased Concentration
Dizziness or Nausea
Dry Eyes
Dry or Itchy Skin
Dry Throat
Fatigue (caused by carbon dioxide build up)
Headaches
Respiratory Problems
Shortness of Breath
Sinus Congestion
Sneezing

Five Common Causes of Poor Indoor Air Quality:

1. Poor Ventilation
2. Indoor Pollutants
3. Pollutants from Outside Sources
4. Biological Contamination
5. Lack of Proper Maintenance

Strategies for Improvement

Ventilation Improvements

Maintain HVAC equipment
Clean vents, ducts and grills
Ensure outdoor air intakes are unobstructed

Provide good ventilation when using harsher cleaning chemicals
Minimize exposure to Hazardous Materials
Eliminate pollutant sources near building air intakes
Control mold and moisture

Cleaning for Health

Cleaning is essential for good health. It protects the health of students, teachers, and staff; creates a more favorable learning environment; improves attendance; increases productivity; decreases potential liability risks, and instills pride of "ownership" in the occupants. Simple, yet effective cleaning procedures will:

- Reduce biological contaminants
- Decrease dust and indoor pollution
- Create cleaner, healthier buildings
- Save scarce resources

Cleaning for Health, Safety & Appearance

- Dusting – Don't forget hard to reach spots.
- Hard Surface Disinfecting
- Hard Floor Care
- Entrance mats, dust mopping, floor cleaning
- Carpet Care
- Vacuum selection and maintenance, vacuuming, extraction

Simple but effective cleaning tasks impact environmental health.
Clean for health first, appearance second.

7. INTEGRATED PEST MANAGMENT (IPM)

The Basic Components of Integrated Pest Management are:

- Monitoring - Regular surveillance of an area for pests using traps and visual inspections.
- Sanitation/Structural Repairs - Pest problems often can be prevented through proper sanitation, reduction of clutter, and performing small repairs that keep pests out of the building.
- Communication - Student and staff cooperation in correcting conditions which contribute to pest problems is essential to the success of an IPM program. For instance, keep any food in covered plastic containers.
- Record Keeping - Monitoring data on pest numbers and observations on sanitation and structural deficiencies.
- Pest Control without Pesticides - IPM methods such as trapping, screening, caulking, steam cleaning and power washing are safer practices than pesticides.

IPM Strategies

The foundation of an effective pest management program is good sanitation.

- Keep food and drinks in designated areas. Do not leave food in desks or lockers.
- Clean up left over foods.
- Clean up spills immediately.
- Discard any infested materials or food items.
- Remove gum from under desks.
- Remove paper clutter and cardboard.
- Do not prop open doors and windows through which pests can enter.
- Remove trash daily, especially trash that contains food.
- Keep refrigerators, vending machines and microwaves clean and free of spills at all times.
- Avoid the use of shelf paper.
- Remove standing water and items that are wet or have been damaged by water.
- Do not move sticky traps or other pest monitoring devices.
- Leave pest control and pest management to trained professionals.
- Be proactive in preventing problems at all times.

If you are requested to spray a pesticide by anyone in the building, call the Facilities Management Services Department at 703.791.7386. Only certified professionals are permitted to apply, spray, or use any kind of pesticide in public school facilities. When pesticides are necessary, the least toxic method available will be used.

8. ENERGY MANAGEMENT PLAN

In response to the rising costs of utilities, Prince William County Public Schools have implemented an Energy Management Plan.

Mission:

To conserve energy and reduce cost through the establishment of an Energy Management Plan, which will include, but not be limited to energy conservation, energy education and awareness, and improved equipment efficiency.

Objectives:

- Reduce costs through energy conservation.
- Provide energy education and awareness for all employees.
- Improve efficiency of lighting and heating, ventilation & air conditioning (HVAC) equipment.

9. EXAMPLE OF CUSTODIAL SHIFT DUTIES

The majority of custodial personnel work on night shift. Daytime custodial duties differ significantly from those of the night shift due to the presence of students and staff. There are not a lot of opportunities to clean during the day without interruptions from students or staff.

Day Shift Duties

- Pick up litter on the grounds. Mow and trim grass as needed.
- Clean assigned areas prior to staff arrival. (Example: office or library.)
- Monitor bathrooms during the day. Restock with supplies (toilet paper, paper towels, soap) as needed. Clean as needed.
- Cafeteria setup: Put supplies in place for breakfast and lunch - trash cans, water and mop for spills, dustpan and broom for trash, and rags and pail for tables. Each school differs in the way they set up the cafeteria tables for breakfast and lunch.
- During lunch, monitor the cafeteria for spills. Clean tables between lunch shifts and empty trash as needed from cafeteria. Always replace bags in cafeteria trash cans as soon as a full one is removed during the lunch shifts.
- After lunch, clean cafeteria tables with a disinfectant solution. Remove food particles on wheels. Dust mop/sweep the floor and damp mop/automatic scrubber the floor with disinfectant detergent solution.
- Check walls for food residue and remove if found. Clean water fountain with a disinfectant detergent. Clean door glass. Clean trash cans with disinfectant solution and place in the area used to store them.
- You are also responsible for other duties as assigned, verbal or written.

Night Shift Duties

Report to Custodial Manager, clock in and get your assignment. You will be shown where the assigned area is and the custodial closet used for that area.

Basic equipment needed:
Trash Cart
Mop bucket and wet mop for spot mopping
Water pail and rag to clean chalk trays
Spray bottle with appropriate chemical for spot cleaning desks and walls
Putty Knife
Glass cleaner
Dust mop
Trash can liners

You may be overwhelmed by the amount of work at first. The following schedule is recommended based on its ease of use. By following the recommendations below, you may find you have extra time to familiarize yourself with the job.

Go through assigned areas and follow these steps:

- In each classroom, empty trash cans and pencil sharpeners, dust mop the floors, spot mop classroom floors where necessary, clean door glass (if applicable), and spot clean windows.
- In bathrooms, dump trash, flush commodes and urinals, sweep the floor.
- Dust mop the hallway, take all trash and recycled items to the appropriate dumpster, and sweep out the dust mop.
- By lunch break, the bulk of the heavy-duty work should be completed and equipment that is no longer needed can be cleaned and returned to the custodial closet.
- After lunch, the bathrooms and detail work (dusting, damp mopping, water fountains, exit doors, steps) can be worked on.
- 15 minutes before the end of the work shift, clean and return equipment to custodial closet.
- You are also responsible for other duties as assigned, verbal or written.

RESOURCES

Custodial Staffing Guidelines for Educational Facilities, second edition, published by The Association of Higher Education Facilities Officers, 1998

The Cleaning, Restoration, Inspection, and Safety (CRIS) Glossary—Clean Care; Sixth Edition: 1999 compiled by L.J. Bishop

IICRC S100; Standard and Reference Guide for Professional Carpet Cleaning, Fourth Edition, published 2002 (Institute of Inspection Cleaning and Restoration Certification)

Butchers Building Block Training System for the Perfectly Clean School, 2000, the Butcher Company

II CRC S500 Standard and Reference Guide for Professional Water Damage Restoration Cleaning for Health Products and Practices for a Safer Indoor Environment, Inform, Inc. 2002