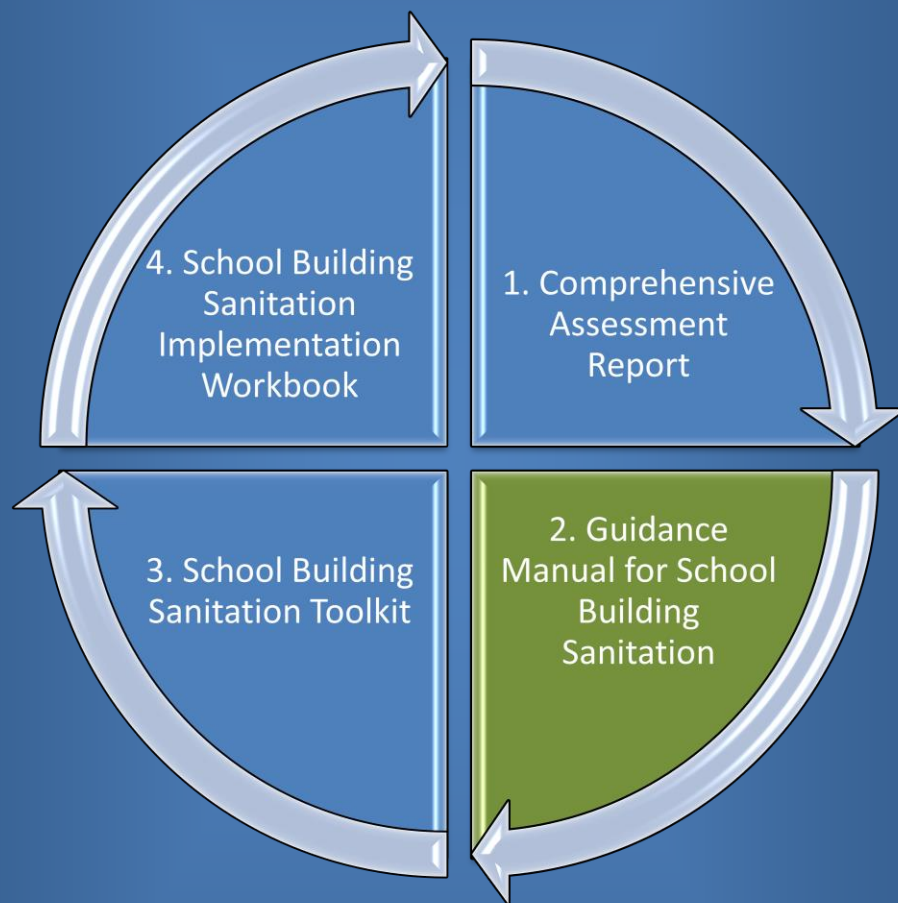


2015

Guidance Manual for School Building Sanitation

1st Edition



COMMUNITY SUPPORTED SCHOOL MAINTENANCE PILOT PROGRAM

Division of Environmental Health
Guam Department of Public Health and Social Services
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Guidance Manual for School Building Sanitation

Foreword

Buenas Yan Hafa Adai! The Division of Environmental Health (DEH) of the Department of Public Health and Social Services (DPHSS) is tasked to conduct compliance inspections of all schools on island to ensure they comply with the numerous sanitation and safety standards provided in our laws and regulations governing school buildings and cafeterias.

While many improvements have occurred to the public school facilities over the years, DEH has continued to observe some of the same violations as in the past due to possible limited resources and short-lived solutions. When schools are not properly maintained and applicable controls are not in place, the facilities can be an ideal setting for the occurrence of communicable diseases such as foodborne illness, influenza, and methicillin-resistant staphylococcus aureus (MRSA), and the establishment of environmental conditions that can lead to injuries (slip and fall, electrocution) and adverse health effects (asthma).

DEH is working to develop an alternative solution to addressing compliance issues, where the existing regulator-regulated relationship that exists between DPHSS and the Guam Department of Education (GDOE) is removed, and instead we focus and nurture a partnership of mutual reliance with the involvement of internal and external community stakeholders.

This document is part of a larger initiative to improve the sanitary and safe conditions of



Guam schools. It is one of four documents, including the 1) *Comprehensive Assessment Report*, 2) *Guidance Manual for School Building Sanitation*, 3) *School Building Sanitation Toolkit*, and 4) *School Building Sanitation Implementation Workbook*. Utilize the *Quick Start Guide* for more information about each document.

With the partnership in mind, this manual was developed as a guidance document to supplement local schools that are striving to improve the way they approach school building sanitation. The *School Building Sanitation Toolkit* is a set of additional handouts, templates, and other effective resources schools can utilize when addressing compliance issues. We encourage all Guam public schools to adopt this Manual and the complementary Toolkit when addressing sanitation issues within the school setting.

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Record of Recommended Changes

Currently, this manual is in a review stage. By distributing the manual to pilot schools, we are hoping to gather feedback on ways to improve the document. Please use this page to provide feedback.

[illegible]

How to Use this Manual

This manual was written as a practical tool to be used when facilitating school improvements. It should be used as a guide or reference when making changes at your school that reflect your efforts to comply with the *Rules and Regulations Pertaining to School Sanitation*. The Manual separates the regulations by the existing sections. Each section provides a general overview, the section of the current regulations, interpretation of the regulations, the public health reasoning behind the regulations, common issues, and preventative measures and solutions. **Figure 1** is an example of the structural nomenclature used in this document.

The manual can be read as a whole or by section as needed. It is meant to be used in combination with the *School Building Sanitation Toolkit*, which provides additional guidance documents to utilize when improving your school sanitation efforts.

Building Our Communities with a Latte Stone Approach

The ancient buildings of Guam were built on top of Latte Stones, and what better way to build a foundation for your school than to get back to the basics. Every child deserves the right to an adequate education in a safe and sanitary environment. Our Latte Stone approach (**Figure 2**) to school building sanitation was constructed by keeping this notion at the forefront and our main priority. The approach is

1. Section Overview of Regulation

1a. Subsection – Current Regulation

Paragraph – Interpreting the Regulation

Paragraph – Why is this a Public Health Issue

Paragraph – Time to Investigate

Subparagraph – Common Issues and Preventative Measures and Solutions

2a. Subsection – Current Regulation

Paragraph – Interpreting the Regulation

Paragraph – Why is this a Public Health Issue

Paragraph – Time to Investigate

Subparagraph – Common Issues and Preventative Measures and Solutions

Figure 1. Nomenclature

built upon four Latte Stones, or pillars: 1) GDOE Leadership, 2) School Ownership, 3) Student Engagement, and 4) Community Engagement. Without all four Latte Stones, it is difficult to manage school building sanitation and puts undue pressure on the other Latte Stones. Much like the traditional Latte Stones from the past, each one must be assembled with solid and supportive materials in order to serve its purpose.

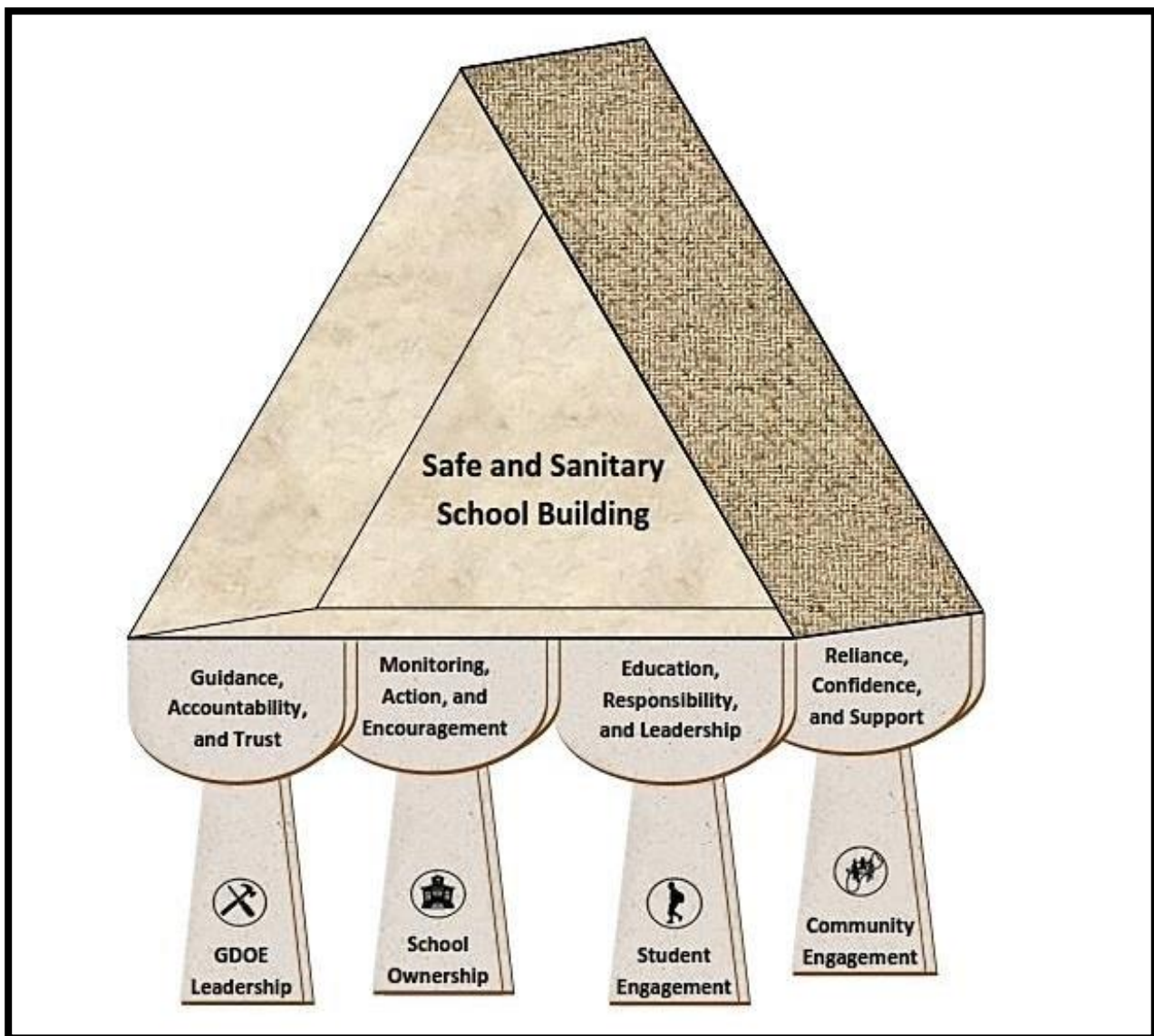






Figure 2. Latte Stone Approach

To build the foundation, you need awareness of the issues facing school buildings. Knowing and understanding the regulations is essential. Once you know what is required of your school, you are better equipped to manage the expectations. This manual lays out common issues that can be found at a school setting and then provides prevention measures that can be taken to avoid the occurrence of those issues and solutions to address the issues once they already occurred.

The prevention measures and solutions sections are categorized by symbols that represent each Latte Stone. Each Latte Stone is equally significant and it is important to know where exactly each Latte Stone fits within an effective system. The next section outlines the symbols used to represent each Latte Stone.

Look for These Symbols to Quickly Identify Listings:

Symbol	Represents	Description
	GDOE Leadership	This type of action is an opportunity for Guam Department of Education to get involved through completing work orders
	School Ownership	This type of action is an opportunity for school administrators, teachers, maintenance, and other staff to tackle the issue
	Student Engagement	This type of action is an opportunity to incorporate students into the school improvement process
	Community Engagement	This type of action integrates the community into the school improvement process

Understanding Critical Violations

Critical Among the many provisions of the rules and regulations pertaining to school sanitation, six requirements are of particular importance for the health, safety, and welfare of the school's occupants, which each school must timely and appropriately address, if and when applicable. When you see the critical violation box, make sure you are addressing the violations immediately.

Common Phrases for Prevention Measures and Solutions

Although specialized action may need to be taken at times, many of the prevention measures and solutions applicable to school building sanitation are the same. This does not mean that they are not effective, but quite the opposite, they are very effective. Why reinvent the wheel when you know you have a solid measure that works in several situations? Below is a list of a few common phrases you will see throughout this manual. Learn these and you are on your way to building a solid program.

Common Phrases	Why it Matters
Report the issue	Do not assume the issue is common knowledge. If the team in charge of resolving the issues is not aware that an issue exists, they cannot take action to resolve the problem.
Submit a work order	Yes, work orders can take a while to be completed, but it will take even longer if the order is never submitted at all.
Use the 3Rs – Repair, Replace, Remove	Determine if the solution is to repair, replace, or remove.
Cordon off area	Do not wait for an accident to occur. Cordon off areas that could cause imminent danger.
Declutter	Remove what you do not need.
Make a request	Submit a donation list. If you do not ask then the answer is automatically no. If there is something your school needs, ask for it.

Coordinate volunteer days	Your mom was right the first time: the room is not going to clean itself. Be proactive. Use the Adopt-a-School Materials located in the <i>School Building Sanitation Toolkit</i> to help guide you.
Perform regular walkthroughs	Sometimes issues become part of the background or scenery because we do not stop to smell the roses, or in this case, the moldy storage room. Without actively monitoring, issues can fall through the cracks.
Use a monitoring system	You do not have to inspect every nook and cranny every day. Create a manageable schedule that works within your existing duties. Use an inventory to keep track of supplies, and a log sheet to document your monitoring. Use the <i>Monitoring List Handout</i> and <i>Monitoring Schedule</i> in the <i>School Building Sanitation Toolkit</i> .
Make it a class activity	Every day is a great day to learn something new. Turn an issue into an opportunity by creating a lesson related to issues the school is addressing.
Work with student organizations	Students have countless ideas at their disposal. Ask for their help when addressing the issues at your school.
Follow-up	Do not assume an issue will be resolved the first time. Keep track of what is working, what is pending, and communicate to keep all parties in the loop. Use the <i>Timeline Cheat Sheet</i> in the <i>School Building Sanitation Toolkit</i> .

DEH Contact Information

For questions regarding *Rules and Regulations Pertaining to School Sanitation*, please contact:

Division of Environmental Health
Department of Public Health and Social Services
(671) 735-7221
dphss-deh@dphss.guam.gov

Regulation Definitions

Please use the following definitions for terms used in this manual.

Term	Definition
American Society of Heating, Refrigerating, and Air-Conditioning Engineers (also known as ASHRAE)	The building technology society that focuses on building systems, energy efficiency, indoor air quality, and sustainability within the industry
Department or DPHSS	The Guam Department of Public Health and Social Services
Director	The Director of Public Health and Social Services or his/her designated representative
DEH	The Division of Environmental Health within the Department of Public Health and Social Services
Handwashing Unit	An area that includes a sink, a soap dispenser, and a sanitary paper towel dispenser
Operator	A person, or business entity, who owns, leases or manages, or proposes to own, lease, or manage, a school, and includes any person designated in the application for a Sanitary Permit to operate a school or having an authority to administer day-to-day operation of the facility and to respond to complaints, orders, and other matters as set forth in these rules and regulations
Person	Any owner, firm, association, corporation, or governmental agency operating a school
Restroom	An area that includes a toilet, toilet paper dispenser, and handwashing unit
Sanitary Permit	The official document issued by the DPHSS authorizing the establishment to operate its business
School	Any establishment, public or private, for the care and education of students from Pre-Kindergarten through grade twelve and any college or university or institution of higher learning
Shower Facilities	A shower room and locker room combined into one area
Unsealed Wood	Bare wood or any porous material that can absorb moisture and potentially lead to mold, since it has not been sealed by a satisfactory sealant
Not in Good Repair	A characteristic indicating the building, grounds, fixture, or equipment has been damaged and not repaired or adequately repaired
Not Maintained	Building, fixture, or equipment - A characteristic indicating it is not clean and/or has signs of wear and tear, which need to be addressed Grounds – A characteristic indicating overgrown vegetation or a condition that can lead to adverse health effects

Guidance for Regulations



1. Grounds

When determining the location of the school, several factors should be considered including characteristics of the location and premises. Noise and air pollution can be distracting conditions in a learning environment, as well as other conditions such as mosquito breeding grounds and overgrown vegetation. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

1a. Regulation - Location

Interpreting the Regulation

The level of noise should be as low as possible, to not exceed 70 decibels. So, what does 70 decibels sound like? A common noise that is 70 decibels is a vacuum cleaner¹. Noises that can exceed 70 decibels include a passenger car at 65 mph when 25 feet away, a garbage disposal, or living room music. Sounds that are within a reasonable noise level are approximately 60 decibels. Some examples of this noise level include restaurant conversations and air conditioning units at 100 feet.

Why is this a Public Health Issue?

Noise pollution can cause considerable damage to an individual from excessive pain to a ruptured eardrum. Noise exposure can pose a major health risk through:

- Hearing impairment;
- Hypertension and ischemic heart disease;
- Annoyance;
- Sleep disturbance; and
- Decreased school performance².

5.1 Location.

5.1.1 The school building shall be located in an area where the intensity of noise will be as low as possible. Noise level at the site should not exceed seventy (70) decibels. The school site shall be away from truck routes, airports, factories and other sources of loud, continuous or sharp impact noise.

5.1.2 The school site shall be located so that it is as remote as possible from sources of air pollution such as manufacturing plants, abattoirs, refineries, open-burning dumps, sanitary landfill operations, polluted streams and any sources of smoke, dust, fumes, or objectionable odors.

5.1.3 Once a school site has been established, no source of objectionable conditions as detailed in 5.1.1 and 5.1.2 above shall be permanently located near enough to a school site so as to create conditions objectionable to the school.

Air pollutants or air toxins are hazardous and known to cause serious health effects³. If people are exposed to air toxins over an extended period of time within certain concentrations, they have a greater chance of serious health effects including:

- Damage to the immune system;
- Neurological effects;
- Developmental impairment;
- Respiratory illness; and
- Certain cancers⁴.

Particulate pollution can be acids, organic chemicals, metals, and soil or dust particles⁵. Exposure to small, fine particles can affect an individual's heart and lungs, from irregular

heartbeat to aggravating an existing asthma condition.







Children can be more vulnerable because their bodies are still developing and their behaviors, such as poor handwashing techniques, may increase their likelihood of coming in contact with more chemicals.

Time to Investigate













Now it is time to take matters into your own hands. Below is a list of common issues that can be found

in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Noise Pollution

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Noise from large events are taking place on or near the campus Construction on or near the campus High traffic area 	    Report the issue – loud, disruptive noises that are affecting class
	 To avoid disruptions of class because of large events taking place in close proximity to the classrooms, schedule large events at appropriate times as to not disrupt class or move the events to another location
	 If construction is taking place on the campus, relocate students to a classroom farther away, schedule construction activities outside school hours, or other actions to minimize or eliminate exposure to students

Air Pollution

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Open-burning dumps Smoke 	    Report the issue – If you notice sources of air pollution
	 Submit a work order
	  Perform regular walkthroughs of the campus to check for air pollution
	  Make it a class activity to inform students of air pollution
	   Follow-up once you report the issue or submit the work order

Pollution from new conditions

Common Issues

- Lack of awareness about regulation

Prevention Measures and Solutions



If a new establishment is being constructed close to the school, keep in communication with DEH to determine what, if any, measures need to be taken

16. Regulation - Premises*Interpreting the Regulation*

Surface drainage is an important aspect of school grounds. Keep the grounds level, and ensure drainage is directed to an area that will not cause puddling or the presence ground depressions. It is important to conduct walkthroughs of the school grounds to check for areas where standing water may be present and to determine what may be causing the issue. By monitoring the grounds and ensuring vegetation is maintained, schools can avoid accidental injuries and prevent the harborage of vectors and pests. Schools should practice source reduction, which means to remove or permanently destruct mosquito breeding sites⁶. Another essential component to the premises is an adequate recreational area that allows students to get the most from their time spent outdoors.

Why is this a Public Health Issue?

When adequate drainage is not available, water will begin to puddle around the school. The puddles create the potential for insect breeding, corrosion of buildings, uneven surfaces, and unintentional injury⁷. Mosquitoes can transmit diseases such as West Nile virus, malaria, encephalitis, and dengue fever⁸.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the

5.2 Premises

5.2.1 The school site, which includes the area used for a playground as well as that immediately adjacent to the school building, shall be evenly graded and sloped so as to provide adequate surface drainage.
















5.2.2 A minimum of 5,000 sq. ft. outdoor recreational area shall be provided which shall be either fenced or properly isolated from vehicular traffic.

5.2.3 The school site shall be free of potential sources of insect and rodent breeding such as open dumps, etc., and shall be located away from low lying swampy areas where mosquitoes breed.

















5.2.4 The school grounds shall be kept clean, free of rubbish and overgrown vegetation, and shall be reasonably level so as to prevent injury.


regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Sloping

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> • Not sloped, poor drainage • Holes in the ground • Uneven surfaces • Damaged drainage pipes 	    Report the issue – any drainage issues to school administration
	 Submit a work order request for all drainage issues to GDOE
	  Cordon off area
	 Fill in holes causing uneven surfaces
	 Use a monitoring system for regular walkthroughs
	 Perform regular walkthroughs of the school after a rainy day to check grounds for proper drainage
	   Make it a class activity – Conduct a walkthrough to check for drainage issues and report any uneven surfaces of concern
	 Use the 3Rs – Repair, Replace, Remove
	 Follow-up

Recreational Area

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> • Recreational area not isolated from vehicular traffic • Fence is not in good condition 	   Close off recreational area by fencing in area
	   Report the issue – vehicular traffic and/or fence condition
	 Perform regular walkthroughs of fence line to check condition
	  Use the 3Rs – Repair, Replace, Remove
	 Submit work order requests when damage is observed
	  Cordon off area where the fence is not in good repair or vehicular traffic is not isolated
	 Make a request – add a new fence to your donation list
	   Coordinate volunteer days to repair the fence

 Use a monitoring system

 Follow up

Vector Control

Common Issues

- Garbage does not have the lid closed
- Puddles of water due to poor surface drainage
- Piles of trash, open dumps
- Clutter in classrooms, offices, storage, etc.
- Conditions which attract, provide harborage, and promote breeding of vermin were identified
- Inadequate vector control
- Insects of public health significance were found

Prevention Measures and Solutions



Make sure garbage lids are closed at all times



Report the issue –

- poor surface drainage
- clutter



Submit a work order request for observed issues



Use a monitoring system – monitor trash and ensure there are enough trash containers on the campus and in the classrooms; if not, submit a request for additional containers



Use trash containers and encourage others to do so



Coordinate volunteer days – “spring cleaning” days to throw away unnecessary articles



Try to incorporate 5S'ing

(<http://www.epa.gov/lean/environment/methods/fives.htm>)



Make a request for additional shelving



Cordon off area – if there are signs of harborage



Coordinate fundraiser to build additional or new shelving



Clean



Exterminate



No eating in classrooms or properly store foods

Grounds Maintenance

Common Issues

- Accumulation of trash or

Prevention Measures and Solutions



Use a monitoring system to check for proper disposal of trash in a timely manner and lawn care

rubbish

- Peeling paint
- Damaged equipment, buildings, awnings, and railings
- Overgrown vegetation, specifically close to buildings
- Grounds are not maintained



Take the last few minutes of class to check for trash



Throw trash in trash containers



Use the 3Rs – Repair, Replace, Remove



Increase the number of trash containers around campus and strategically place to encourage use



Separate trash from recycling to reduce trash volume



Install larger dumpsters



Scrape paint before repainting



Schedule scraping and repainting of areas with peeling paint



Coordinate volunteer days and/or volunteer to scrape and paint campus or mow



Report the issue – damaged equipment



Submit a work order request for damaged equipment to be repaired or removed



Make a request – submit a list of donations needed to parents/community



Consider reducing school perimeter by relocating fence line



Pave/pour concrete on certain area(s)



Coordinate volunteer days specifically geared towards landscaping



Plant turf grass that doesn't grow tall



Cordon off area



Perform regular walkthroughs



Make it a class activity



Follow-up

2. Building

School buildings play an integral role in a student's academic performance. Providing a safe and sanitary environment allows students to focus on learning and less on the unsightly and possibly unhealthy aspects of the school. When DEH inspectors conduct a walkthrough of a building, the following areas are assessed: rooms, floors, walls and ceilings, doors and windows, classroom equipment, seating, maintenance and housekeeping, and design and construction. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

2a. Regulation – Rooms

Interpreting the Regulation

School buildings need to promote a positive learning environment. School staff need to be aware of the ideal space requirements for effective learning. Utilizing the *Ratios Worksheet* form, found in the *School Building Sanitation Toolkit*, schools can measure each room to determine the appropriate number of students per room. Clutter is an important factor to consider, as well. Even though the room meets the square footage requirement, stacks of boxes or papers, unnecessary equipment, and other types of excessive clutter can lead to an inadequate amount of space and unwanted pests. Pests gravitate towards clutter. Keep classrooms clutter-free and practice effective cleaning measures. Make it easier to keep the rooms clean by providing the appropriate number of trash cans and scheduling time to clean the space. To practice effective pest management, request additional containers for your room. If you plan to recycle, make sure you store recyclables in the proper storage containers. Cardboard boxes on the floor are not proper

6.1 Rooms

6.1.1 The classroom areas shall be of sufficient size to provide at least 25-30 sq. ft. of space per child in elementary schools, 20-25 sq. ft. of space per child in secondary schools, and at least 18-20 sq. ft. per child in high schools.

6.1.2 Rooms shall be kept clean, neat, and orderly with approved waste paper containers provided.

6.1.3 The janitorial rooms, and any storage area used to store hazardous materials, shall be locked to prevent student access.

storage containers because the custodial staff cannot clean effectively around the containers, and the boxes are more like to collect dust and become water damaged, causing public health issues. Janitorial rooms, storage rooms, or even storage areas should be secured at all times to avoid access to hazardous materials.

Why is this a Public Health Issue?

It is just as important to check the health of a room as it is to check the health of the students. Unhealthy school environments can lead to “sick building syndrome,” where occupants of a building associate their acute health-related or comfort-related effects to the building⁹. Sick buildings can expose students to symptoms such as respiratory irritation, sore throats, drowsiness, headaches, asthma attacks, and poor concentration¹⁰. Poor control measures can lead to ineffective learning, increased absenteeism, and a poor attitude about





















the school. It's important to keep the room clean, organized, and uncluttered.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more,

or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Rooms

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> • Inadequate sq. ft./child • Lack of staff, two classes in one room • Rooms are disorganized • Room is not maintained • There are excessive amounts of dirt • Floors are stained • The room is cluttered • Insufficient space for storage • Old equipment and books are taking up space • There are not approved waste containers • The trash is overfilled • Room is locked • Missing baseboards • Trash container needed for recycling 	 Double check the student population and class size on a regular basis to avoid overcrowding
	   Report the issue – <ul style="list-style-type: none"> • if you feel the room is overcrowded, report this issue to school administration • excessive dirt • if class does not have an approved waste container
	   Use a monitoring system – <ul style="list-style-type: none"> • monitor and report disorganized rooms • check for old equipment that needs to be removed • make sure custodial staff is effectively cleaning floors on a regular basis
	  Do your part to keep it clean
	 Talk to your students about keeping the rooms clean
	   Coordinate volunteer days to clean or organize rooms
	  Sweep the room weekly, checking for areas that may be missed by the custodial staff
	 Try to incorporate 5S'ing http://www.epa.gov/lean/environment/methods/fives.htm
	  Use the 3Rs – Repair, Replace, Remove (Remove unnecessary equipment from classrooms)
	 Submit a work order request for new containers
	 Follow-up with contractor to supply new waste

containers



Dispose of trash regularly; request more trash containers if needed



Be mindful of your own efforts to keep the room clean; pick up trash

Janitorial Rooms

Common Issues

- Storage rooms with hazardous materials are not secured
- Hazardous materials are in classrooms, easily accessible
- Hazardous materials do not have proper ventilation
- Inadequate storage or insufficient space for storage
- No mop sink

Prevention Measures and Solutions



Lock storage rooms and regularly monitor



Store hazardous materials appropriately



Purchase locks for storage rooms or classrooms to store hazardous materials



Perform regular walkthroughs to ensure hazardous materials are locked at all times



Report the issue – Let teachers or administrative staff know if you are able to access hazardous materials



Use the 3Rs – Repair, Replace, Remove (Remove hazardous materials from rooms with poor ventilation)



Declutter



Submit a work order request for rooms without proper ventilation



Follow-up

26. Regulation – Floors

Interpreting the Regulation

Maintaining the floors of the rooms helps keep unwanted pests away and prevent accidents. Make sure that the floors are easy to clean and that they are cleaned on a regular basis. Preventative

6.2 Floors

6.2.1 The floors of all the rooms shall be of such construction as to be easily cleanable, light in color, and shall be kept clean and in good repair.

6.2.2 The floors shall be made from materials approved by the Department.

6.2.3 Floors without carpeting shall be sealed with satisfactory floor sealer (a dust arresting compound used while sweeping.)

6.2.4 Floors in the toilet rooms shall be impervious, easy to clean material.

maintenance will help to avoid excessive costs of replacing large amounts of flooring in the school. By scheduling daily cleaning and bi-monthly intensive cleaning of the floors, schools are more likely to maintain the floors and students are less likely to complain of issues with dust and pests. Also, keeping the floors clear and creating easy paths promotes safety. Tripping hazards, such as extension cords, can turn into an accidental injury that could have been avoided.

Why is this a Public Health Issue?












In 2011, the National Safety Council reported falls as one of the leading causes of unintentional injuries in the US¹¹. When areas are cluttered, surfaces uneven, and floors prone to wetness, there is a greater risk for falls. Maintaining a school

building is as important as the initial design and can lead children to the exposure of mold, pests, and physical injury¹².

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Floors

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Floors are damaged There are not light in color They are stained They have excessive dirt There are sharp edges sticking up Areas of the floor are loose causing a tripping hazard Floors are not sealed Tripping hazards Sealant has worn away leaving areas of bare wood exposed; difficult to clean Missing floor tiles Floors are absorbing liquids 	 Make a request that custodial staff increase the frequency they clean and wax floors
	   Report the issue – <ul style="list-style-type: none"> stains damage
	 Use a monitoring system with custodial staff to ensure rooms are being cleaned thoroughly
	    Use the 3Rs – Repair, Replace, Remove <ul style="list-style-type: none"> Remove or repair floors/floor tile(s) to eliminate tripping hazards Remove and repair missing tiles
	 Perform regular walkthroughs of your room and check for any cords, tape, or other items that could cause tripping hazards. Remove or rearrange them to eliminate the hazard
	 Submit a work order request to have floors sealed or repaired



Discontinue use of vinyl tiles and change to more durable material



Cordon off area – where floors are absorbing liquids

2c. Regulation – Walls and Ceilings

Interpreting the Regulation

Walls and ceilings should be cleaned on a regular basis to avoid excessive dirt or dust, which can cause irritation to the students and teachers. Having a light color on the walls and ceilings helps to maintain the cleanliness of the room because it is easier to see the dirt and stains. A flat finish can help to avoid excessive glare. It is important to repair any walls or ceilings in a timely manner. Damages such as water stains can lead to mold in the room and holes to the outside provide opportunities for unwanted pests to enter the classroom.

Why is this a Public Health Issue?

Excessive dirt and uninvited pests lead to indoor air quality issues, which can result in a negative impact on a student's health such as respiratory and asthma symptoms¹³.

Walls and Ceilings

6.3 Walls and Ceilings

6.3.1 Walls and ceilings shall have surfaces of light color and flat finish, and shall be kept clean and in good repair. Walls shall be finished with easily cleanable material.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Common Issues

- Walls and/or ceilings are a dark color
- Paint is not a flat finish, making light too reflective
- Walls and/or ceilings are stained
- Walls and/or ceilings have excessive dirt
- Walls and/or ceilings have

Prevention Measures and Solutions



Be your own inspector using the classroom checklist



Submit a work order request

- for new paint that is light in color
- to clean or repair walls and/or ceilings
- to inspect the source of the stain, i.e., leak
- for new paint that is a flat finish



Coordinate volunteer days to paint rooms

holes or damage

- Walls and/or ceiling are difficult to clean
- Peeling Paint
- Mold observed on walls and/or ceilings
- Missing/Damaged tiles
- Use of unsealed wood (lumber or plywood)
- Walls where fixtures have been removed have not been closed causing outer openings
- Ceiling tiles need to be adjusted
- Excessive dirt/stains by light switch
- Wall(s) not in good repair
- “Water bubbles” in walls
- Water damage



Use a monitoring system



Cordon off areas



Report the issues –

- any excessive dirt
- to your teacher if you are having issues due to glare from the walls and light
- any stains observed, holes, or other damage to walls and/or ceiling



Follow-up with custodial staff to ensure rooms are cleaned adequately



Talk to your students about keeping the walls and ceilings clean



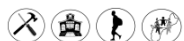
Do spot checks and clean areas with excessive dirt



Improve surface preparation before painting to reduce peeling and chipping of paint



Do your homework - use the right paint for the right surface



Seek and obtain free professional recommendation on paints and painting



Use the 3Rs – Repair, Replace, Remove

- Prevention is key – remove conditions that cause mold growth
- Repair underlying issues that may be causing standing water, such as leaks and A/C condensates



Reduce humidity by installing a dehumidifier and increasing ventilation through use of mechanical ventilators, when A/C is not available



Standardize replaceable materials and discontinue use of ceiling tiles altogether; it also allows early detection of ceiling leaks to prevent slip-fall hazard and mold growth



Paint or stain to minimize water damage and mold growth



Adjust ceiling tiles

2d. Regulation – Doors and Windows

Interpreting the Regulation

Emergency preparedness is important in a school setting. Providing exits that are accessible and plainly indicated helps the occupants of the room if an emergency situation arises. The opening of classroom doors shall conform to the Uniform Fire Code currently adopted by the Guam Fire Department. Exit doors shall swing in the direction of the path of exit travel (outward) when serving any hazardous area or when the area serves an occupant load of 50 or more.

Cracked windows and unintended outer openings cause more opportunities to develop pest problems in a room. Keeping doors and windows in good repair ensures adequate vector control, as well as assists custodial staff in effectively cleaning them.

Why is this a Public Health Issue?

Not screening windows effectively and allowing outer openings through doors that are not fitted correctly negatively affects pest management in a classroom. Common pests found in schools are flies, cockroaches, spiders, mice, termites, and ants¹⁴. Pests can spread diseases, irritate allergies, and cause structural damage.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found

6.4 Doors and Windows

6.4.1 For the multi-story school building, exits shall be provided which are easily accessible and plainly indicated. Exit signs shall be posted at the front side of the exit door.

6.4.2 Rolling, sliding, revolving, or double acting doors are prohibited. Entrance doors shall be self-closing and shall open outward.

6.4.3 Doors and windows shall be kept clean and in good repair.

6.4.4 Where insect pests are a problem all openings to the outer air shall be screened effectively, unless other effective means are provided to prevent the entrance of insects. Plastic cloth or wire screen shall be not less than 16 mesh to the inch.

in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Doors and Windows

Common Issues

- Exits are not easily accessible, i.e., doors are blocked by desk or clutter

Prevention Measures and Solutions



Keep exits accessible



Ensure you have an exit sign

- Exits do not have signs (not plainly indicated) or are not in good repair, posted incorrectly
- Exits are locked
- Doors are rolling, sliding, revolving, or double acting
- Doors do not have self-closing device or self-closing devices do not work
- Doors open inward
- Doors and/or windows are not clean, have excessive dirt
- Doors and/or windows are damaged or do not work properly
- Openings are not screened
- Outer openings exist, i.e., doors not fitted appropriately
- Appropriate screening is not used
- Missing Louver(s)
- No door knob
- Plexiglass not in good repair
- Window(s) are boarded up
- Window(s) completely blocked off or used for decoration



Do not lock doors



Report the issue –

- any doors that do not meet requirements
- any exits that are not accessible
- any windows that are not screened effectively, outer openings from windows or doors, and damage
- any areas that are not being cleaned regularly



Use a monitoring system – regularly monitor rooms to check that self-closing devices are working



Talk to teachers about adequate walkways and not blocking exits



Submit a work order –

- request for new doors
- for repairs
- for new windows screens and/or to replace or adjust doors



Coordinate volunteer days to clean



Use the 3Rs – Repair, Replace, Remove



Make a request – coordinate a fundraiser to seek donations for new exit signs, self-closing devices, and supplies to clean



Follow-up

2e. Regulation – Classroom Equipment

Interpreting the Regulation

Classroom equipment needs to be cleaned on a weekly basis. Excessive dust on equipment can irritate both students and teachers by providing poor indoor air quality. Because offices and classrooms are shared, the items within the rooms are commonly shared, so it is important to keep them clean to reduce the spread of germs. Check the supplies brought into the classroom to ensure there is no lead or lead compound.





Why is this a Public Health Issue?

Teachers are exposed to more bacteria than any other major professions with 17,800 bacteria per square inch of workspace surface. Pencil sharpeners are one of the most contaminated pieces of classroom equipment.¹⁵

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues

Classroom Equipment

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Classroom equipment is not clean and has excessive dirt Classroom equipment is damaged Classroom equipment has mildew or mold Chalkboards are damaged Chalkboards are located in a high light contrast area 	<div>  </div> <p>Coordinate volunteer days – organize cleaning days</p> <div>    </div> <p>Report the issue –</p> <ul style="list-style-type: none"> any damage to classroom equipment crayons/chalk that contain lead issues with seeing the board mildew or mold on equipment excessive dirt

6.5 Classroom equipment

6.5.1 The classroom equipment such as chalkboards, erasers, and furniture shall be kept clean and in good repair.

6.5.2 Chalkboards shall be black or green, dull finish, and shall have smooth, even surfaces with no cracks and as few seams as possible.

6.5.3 Chalkboards shall be located so as to be easily seen by the intended users, and opposite windows so as not to create areas of high light contrast near or behind chalkboards.

6.5.4 The use of crayon or chalk containing lead, lead compound, or dangerous soluble methyl bromide dyes is prohibited.

occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

- Crayons and/or chalk contain lead



Submit a work order request to repair or replace classroom equipment or investigate issues with mold



Use the 3Rs – Repair, Replace, Remove equipment (if replaced, make sure old equipment is disposed of appropriately)



Perform remediation measures to eliminate mildew or mold including finding the source of the moisture



Follow-up with custodial staff to ensure adequate cleaning is taking place on a regular basis



Rearrange seats



Take 10 minutes once a week to clean equipment



Use a monitoring system



Declutter

2f. Regulation – Seating

Interpreting the Regulation

Each student should have a seating unit that is clean and in good repair. If a student complains of discomfort, has scratches or red marks on the back of their legs, or expresses concern over the cleanliness of the desk's surface, then action should be taken to correct these issues. Seating should be arranged so that students are not affected by glare from outdoor light or a constant air current from a fan or air conditioner.

Desks are notorious “germ cafeterias” with up to 400 times more bacteria than toilet seats.¹⁶ Although this section of the regulations does not specifically state that desks need to be cleaned, other areas of the regulations, such as the Maintenance and Housekeeping section, cover

6.6 Seating

6.6.1 Each student shall have an individual seating unit with writing table attached or adjacent to the seat and so constructed as to provide comfortable seating and convenient writing without undue strain.

6.6.2 Where windows are the primary source of illumination the desks shall be so arranged that the light is admitted from the left and rear of the seated children. Left-handed children shall be located where light is received from the right side.

6.6.3 When the pupil is erectly seated with feet squarely on the floor, there must be no pressure from the forward edge of the seat under the knees.

6.6.5 Writing tables attached to the desk shall be smooth and light in color to provide a limited contrast against a white paper.

cleanliness of equipment, which includes seating.

Why is this a Public Health Issue?









A student's comfort in the classroom can affect his or her ability to concentrate. Students should not have any undue strain by seating that is too low or too high, damaged, or poorly arranged.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found

in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Seating

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> • There is not enough seating for all students • Desks are damaged, not smooth, or dark in color • Seats are not the appropriate size for the students • Seats and/or desks are not clean • Seats are not arranged in the appropriate direction to the light in the room • Desk(s) are not light in color and easily cleanable 	 Report the issue – <ul style="list-style-type: none"> • lack of seating • damaged desks • undue strain due to seating • excessive dirt on desks
	 Make a request for new seating
	 Put yourself in their seats - routinely check your room to ensure seating is ideal arrangement
	 Take 10 minutes once a week to clean desks
	 Monitor rooms to ensure all areas of the classrooms are being cleaned adequately
	 Use the 3Rs – Repair, Replace, Remove desks (if replaced, make sure old equipment is disposed of appropriately)
	 Coordinate volunteer days to resurface old desks
	 Submit a work order request for new desks

6.7 Maintenance and Housekeeping

6.7.1 There shall be sufficient space for the storage of outdoor clothing raincoats maintenance equipment, ground equipment, and instructional equipment to prevent cluttering of classrooms, walkways, or other areas

6.7.2 All areas, facilities, and equipment shall be maintained in a clean, safe, and sanitary condition and kept in good repair.

6.7.3 The building shall be free of insects of public health significance and conditions which attract, provide harborage, and promote breeding of vermin.

6.7.4 When sweeping floors, a dust arresting compound shall be used in classrooms. (*No longer applicable)

2g. Regulations – Maintenance and Housekeeping

Interpreting the Regulation

Storage space should be taken into consideration when determining classroom size. Storage rooms and classrooms should have adequate space for supplies, as well as clear paths. Having an organized room reduces the amount of clutter and lessens the chance to develop unsanitary conditions.

Why is this a Public Health Issue?

Table 1 is a list of pests identified as pests of significant public health significance, according to EPA in coordination with the US Department of Health and Human Services and the US Department of Agriculture¹⁷.

Pests	What Makes them of Significant Public Health Importance
Cockroaches	Spread asthma, allergy, and food contamination
Body, head, and crab lice	Spread of skin irritations and rashes, and occurrence of louse-borne diseases such as epidemic typhus, trench fever, and epidemic relapsing fever in the US
Mosquitoes	Spread of mosquitoes bearing such diseases as malaria, West Nile virus, encephalitis, and dengue fever
Ticks	Spread of Lyme disease, tick-borne relapsing fever, ehrlichiosis, and Rocky Mountain spotted fever
Bed Bugs	Bites can cause allergic reaction
Various Rats and Mice	Spread of rodent-borne diseases and contamination of food for human consumption
Various Microorganisms, including bacteria, viruses, and protozoans	Spread of numerous diseases
Reptiles and birds	Spread of disease and prevention of direct injury
Various Mammals	Potential for direct human injury and act as disease reservoirs































Table 1. Pests of Significant Public Health Significance

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues

occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Maintenance and Housekeeping

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> There is not enough storage in the room, room is crowded Storage areas are not maintained Equipment is not stored properly There is clutter in the room and walkways Areas, facilities, and/or equipment are not maintained Equipment is damaged causing safety issues Vector control issues in storage area Benches are not secured Excessive rust Exposed rebar Handrails are not in good repair Mold Old equipment needs to be removed Unsealed wood 	<div>     </div> <p>Make a request for new storage or shelving to be donated or built</p> <div>     </div> <p>Meet regularly with custodial staff, provide checklists, and submit work orders if needed</p> <div>     </div> <p>Coordinate volunteer days to organize rooms</p> <div>     </div> <p>Perform regular walkthroughs to determine what is not maintained</p> <div>   </div> <p>Cordon off area</p> <div>   </div> <p>Declutter</p> <div>   </div> <p>Secure benches and handrails</p> <div>  </div> <p>Use a monitoring system to monitor storage areas and create monitoring schedules</p> <div>    </div> <p>Report the issues</p> <div>  </div> <p>Try to incorporate 5S'ing (http://www.epa.gov/lean/environment/methods/five_s.htm)</p> <div>  </div> <p>Maintain all areas including storage, organize equipment, and create an inventory</p> <div>   </div> <p>Mold remediation</p>

2g. Regulations – Design and Construction

Interpreting the Regulation

There are several standards and regulations schools must follow to provide a safe environment. Keeping all regulations and standard operating procedures readily available provides the opportunity for staff to become more aware of what is expected at the school.

Why is this a Public Health Issue?

The additional codes required are in place to prevent conditions that could be detrimental to students, staff, and the existing structure. The codes may not be related to school building sanitation; however, it is equally important to adhere to the codes to ensure the safety of the occupants.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the










6.8 Design and Construction

6.8.1 It shall be the responsibility of the operator to meet the standards of these and other applicable regulations.

6.8.2 Adherence to the latest editions of the Uniform Plumbing Code, Uniform Building Code, Uniform Mechanical Code, National Electrical Code, and the Guam Fire Prevention Code shall be required for all new construction.

regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Design and Construction

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Exposed wires Outlet is not in good repair 	  Perform regular walkthroughs checking that all areas are in compliance with other applicable codes
	   Report the issues
	 Submit a work order request
	  Use the 3Rs – Repair, Replace, Remove
	 Follow-up

3. Ventilation

Critical Adequate ventilation plays a vital role in a student's comfort in a classroom. Poor ventilation can contribute to airborne mold, infectious diseases, and carbon monoxide poisoning¹⁸. The quality of air can affect a student's ability to concentrate, affecting their overall performance. According to the American Society of

Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) 62.1 – 2010, indoor air can be two to five times more polluted than outdoor air. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

- 7.1 Ventilation shall be adequate to provide proper circulation of needed air within a room by either windows or mechanical ventilators.
- 7.2 All rooms, areas, and equipment, from which contaminated aerosols, obnoxious odors, or noxious fumes or vapor may originate shall be effectively vented to the outside air.
- 7.3 Windows, including louvers opened from the bottom, which cause direct currents of air on students nearby, shall be provided with window ventilators or deflectors.
- 7.4 Windows, including louvers, shall be adjustable at the top and bottom, and when this is the only means of ventilation, at least one-half (1/2) of the windows shall open from both top and bottom.
- 7.5 Ducts and fans in connection with mechanical ventilation shall be so arranged and controlled as to eliminate objectionable air currents directly on the students.
- 7.6 When mechanical ventilation is provided, all openings to the outer air shall be closed to maintain required temperature to the entire room area.
- 7.7 When mechanical ventilation is provided, it shall be kept clean and in good repair.

3a. Regulation – Ventilation

Interpreting the Regulation

Current school regulations require “adequate ventilation” of all rooms. Unfortunately, no specific criterion or standard is provided in the regulations to define “adequate ventilation,” so DEH adopted a policy to enforce this provision. The Division decided to utilize the ambient temperature of a room to indirectly assess ventilation since ventilation can significantly influence temperature. DEH recognizes the drawback of such criterion given that temperature does not address air quality, but did so out of necessity due to the absence of appropriate resources (instruments and training) to quantify air contaminants and the time-consuming efforts necessary to effectively calculate and analyze ventilation rate for each classroom.

Temperature measurement, on the other hand, is simpler, faster, less expensive, and DEH possessed the equipment to take such reading. The Division currently uses standards created by the ASHRAE. ASHRAE established standards using natural ventilation in its Standard 55, Thermal Environmental Conditions for Human Occupancy, which created the acceptable temperature ranges for naturally ventilated buildings based on outdoor temperature. The standard specifies conditions acceptable to a majority of a group of occupants

exposed to the same conditions within a space. Based on Guam's monthly mean temperature of about 81°F, the acceptable range for 90% of people is approximately 75°F – 84°F using ASHRAE's Standard 55.

DEH requires rooms to have a relative humidity of less than 70%. Relative humidity, which indicates the amount of moisture in the air, above 70% promotes the growth of mold, which can be an allergen to students and faculty.

Why is this a Public Health Issue?













Adequate ventilation plays a critical role in maintaining a comfortable classroom. Effective ventilation of classrooms allow for the removal of objectionable odor, excessive carbon dioxide,

unhealthy levels of allergens and microorganisms, and other air contaminants that can cause harm and/or discomfort to students and faculty.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Ventilation

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> • There is inadequate ventilation • There is excessive dust and/or dirt on mechanical ventilation, A/C and/or windows • There is rust on A/C and/or windows • Aerosols, odors, fumes, and/or vapors are not vented to the outside – objectionable odors • Louvers are broken or not adjustable • There are no window ventilators or deflectors • A/C not maintained and do not work properly • Mechanical ventilation is not in good repair • Relative humidity is >70% 	 Discontinue the use of any room that cannot be maintained at a constant temperature of 84°F or below
	 Remove students from room and transfer to another classroom that complies with requirement
	 Utilize room only when the room can remain the appropriate temperature (i.e., only in the mornings)
	   Purchase fans or additional mechanical ventilation
	 Submit a work order
	  Install ceiling fans to augment A/C in classrooms
	 Install appropriately sized/type vent system in rooms – restrooms and classrooms
	  Purchase and install additional or more powerful mechanical devices to promote ventilation

- Temperature is >84°F



Follow-up with custodial staff to ensure A/C and windows are cleaned regularly



Coordinate volunteer days to clean



Do not use air fresheners to cover up smells, which can further contribute to the problem



Report the issues



Use the 3Rs – Repair, Replace, Remove louvers



Make a request for environmental meters



Use a monitoring system to check for broken louvers



Keep A/C turned on to retain cool temperature



Follow the factory recommended maintenance schedule of any mechanical device to ensure continued operation



Implement a plan that allows for the quick repair or replacement of mechanical ventilation in the event that it becomes inoperable or unavailable

4. Lighting

Critical

Lighting affects a student's ability to learn, a teacher's ability to teach, and custodial staff's ability to clean the area. People spend over 90 percent of their time indoors and better lighting can contribute to improved participation and more positive attitudes in

students¹⁹. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

4a. Regulation – Lighting

Interpreting the Regulation


Whether natural or artificial light, it is necessary to implement good lighting strategies in classrooms. When using natural lighting, keep in mind that glare should be kept at a minimum. Windows need some form of shield, shade, or blind to minimize glare. Artificial light should be available in place of natural light when weather conditions affect the illumination of the room. The shades should not be permanently secured (ex: drilled or hammered) to the windows because it can affect the ability to keep both the shades and windows clean. Although shades are necessary, decorations are not. Decorations should not cover windows to a point that the lighting in the room is too low. Lighting is measured in a unit of measurement called “foot-candle.”

Why is this a Public Health Issue?

Poor lighting can affect a student’s health and their ability to learn²⁰. Not only is it difficult to see, it can change students’ behavior. A two-year study performed in Johnson County, North Carolina report that using full-spectrum light induced more positive moods. Classrooms in Seattle, Washington that had a larger window area had students testing 9 percent to 15 percent higher than students in classrooms with less window area.

Time to Investigate




















Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions

- 
- 8.1 When adequate natural light is not available, artificial light shall be provided to promote a comfortable visual environment.
 - 8.2 Windows shall extend as near to the ceiling as possible and shall be located along one (1) side or two adjoining sides of the study room.
 - 8.3 The total window area shall be not less than 20 percent of the floor area unless adequate artificial lighting is provided.
 - 8.4 All classroom windows shall be provided with light shields, shades, or blinds which shall be kept clean and in good condition and so used or adjusted that glare and excessive light intensities are reduced to a minimum.
 - 8.5 Window panes shall not be used for decorations or objects which shut out the light.
 - 8.6 Minimum acceptable levels for school lighting in the following areas shall be:
 - 8.6.1 Lecture rooms, study halls, laboratories, offices, libraries, art rooms, and electronic and machine shops—30 foot-candles.
 - 8.6.2 Classrooms for partially seeing children and those who lip read—50 foot-candles.
 - 8.6.3 Reception rooms, gymnasiums, and all swimming pools—20 foot-candles.
 - 8.6.4 Auditoriums, cafeterias locker rooms, corridors and stairways—10 foot-candles.
 - 8.7 Artificial lighting in all areas except storage areas shall be diffused, indirect, and glare-free.

section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation*

Checklists and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Lighting

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> There is not enough adequate light Windows are not located in the appropriate place to make the room conducive for learning Windows are less than 20 percent of the floor area Light shields, shades, or blinds are not provided and/or are damaged or missing Light shields, shades, or blinds are not maintained, had excessive dirt, dust, and/or rust Windows are covered with decorations or other objects shutting out the light Minimum acceptable levels of school lighting are not being followed Lighting is not diffused, indirect, or glare-free Burnt out lights Lighting fixtures are not installed correctly 	 Use more outdoor lighting
	  Use the 3Rs – Repair, Replace, Remove <ul style="list-style-type: none"> ballasts of fluorescent lights lights (remove) decorations that cause lighting to be unacceptable levels
	   Report the issue
	    Follow-up with custodial staff to ensure light fixtures cleaned
	 Make a request for environmental meters that can measure light intensity
	 Submit a work order request
	   Use a monitoring system to check lighting and light fixtures
	  Perform regular walkthroughs
	 Make it a class activity
	 Check electrical power source

5. Plumbing



Plumbing issues can cause considerable threats to the health of students and staff. A plumbing violation is a critical violation and can cause an area, or the entire school, to be closed. This section will outline what

factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

5a. Regulation - Plumbing

Interpreting the Regulation

During the pre-operation stage, schools should ensure that all efforts have been made to properly size, install, and maintain plumbing. Please refer to the plumbing code for more information regarding approved plumbing installations.

Why is this a Public Health Issue?

The improper disposal of human waste and other sewage in schools can threaten the health and comfort of students and faculty. Pathogenic microorganisms and toxic chemicals can be found in wastewater; thus, it must be collected, contained, transported, and disposed of in an approved manner. CDC documented 57 waterborne disease outbreaks from 1981 – 1998 that were related to cross-connections²¹. The outbreaks resulted in 9,734 illnesses.







Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues

- 9.1 Plumbing shall be sized, installed, and maintained to carry adequate quantities of water to required locations throughout the school, to prevent contamination of the water supply, to properly convey sewage and liquid wastes from the school building to the public sewage system or to an individual sewage disposal system approved by the Department so as not to create an unsanitary condition or nuisance.
- 9.2 Plumbing installations shall be in conformance with the current Uniform Plumbing Code at the time of construction unless it is determined at a later date that such previous installation could result in serious hazard to the public health. Such plumbing shall then be changed to conform with the latest edition of the Uniform Plumbing Code.

occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Plumbing

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Plumbing is not sized, installed, and maintained correctly Installations are not in conformance Plumbing fixtures not in good repair 	<div>   </div> <p>Identify all areas of the school that are prone to sewage back up and seal off these areas from use and access by students and faculty, provided such action will not violate any other requirements of law</p> <div>   </div> <p>Use a monitoring system to monitor school sewage system and island's weather</p> <div>   </div> <p>Implement a plan for the immediate release of students upon first sign of back up</p>



Cordon off areas, such as restrooms, from access and use by students



As a temporary solution, provide portable chemical toilets equivalent in number to that required to maintain student-toilet facility ratio provided in the regulations



Report the issue



Submit a work order



Use the 3Rs – Repair, Replace, Remove



Follow-up

6. Water Supply

Critical

Drinking water is a necessary component in a school setting. Drinking water is needed by all occupants and is important for overall health. It is especially important to stay hydrated in a tropical climate. Providing clean and safe drinking fountains is critical. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

6a. Regulation – Water Supply

Interpreting the Regulation

Potable water must be made available to students and faculty for proper hydration during school hours by means of a water fountain

10.1 Each school building shall be provided with an ample supply of water from an approved public water system. Water supply shall be safe and of sanitary quality.

10.2 Drinking water dispensed by means of drinking fountains, cups and water coolers shall conform to the following:

10.2.1 Drinking Fountain

10.2.1.1 Drinking fountains shall be kept clean and in good repair.

10.2.1.2 Drinking fountains shall be provided in the ratio of one per each 75 students.

10.2.1.3 Drinking fountains shall be constructed of impervious material, such as stainless steel, vitreous china, porcelain, enamel, or stoneware.

10.2.1.4 The jet of the drinking fountain shall issue from a nozzle of non-oxidizing, impervious material set at an angle from the vertical so as to prevent the return of water in the jet to the office or orifices from whence the jet issues. The nozzle and every other opening in the water pipe or conductor leading to the nozzle shall be above the edge of the bowl.

or a water cooler. Ideally, these water dispensers should provide cool or cold water to provide comfort and heat relief for students and faculty, especially during and after physical exertion. If available water fountain is meant to provide chilled water, it must do so, or otherwise it is deemed not in good repair.

Water fountains should be accessible across the school setting. Utilize the *Ratios Worksheet* in the *School Building Sanitation Toolkit* to determine how many water fountains are required at your school.

Backflow preventers are necessary to avoid issues with back-siphonage or cross-connection.

Why is this a Public Health Issue?

Drinking water that has been contaminated by harmful chemicals and micro-organisms can threaten the health of students and staff²². Cross-connections and backflow are estimated to cause 78 percent of outbreaks²³. A major concern regarding adequate drinking water is lead in water from plumbing components.

Time to Investigate


























Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at

- 10.2.1.5 The end of the nozzle shall be protected by a non-oxidizing guard to prevent the mouth and nose of a person using the fountain from coming into contact with the nozzle.
- 10.2.1.6 The bowl of a drinking fountain shall be free from corners so as to be easily cleanable and to avoid collection of dirt.
- 10.2.1.7 Drinking fountains shall not have a direct physical connection with a waste pipe unless the drain is trapped.
- 10.2.1.8 The waste opening and pipe shall be provided with a strainer and be of sufficient size to carry off the water promptly.
- 10.2.2 Single service cups shall be used for dispensing drinking water from imported bottled spring water or water coolers. Single service cups shall be stored, handled, and dispensed in a sanitary manner.
- 10.2.3 Water coolers used for dispensing drinking water shall be provided with a cover, and shall be kept clean. Dipping of water from a water cooler is prohibited.
- 10.2.4 Other cups such as individually owned cups shall be used only by one owner.
- 10.3 The school water supply system shall be in a good working order at all times so as to adequately supply the water demand of the school.
- 10.4 All water outlets shall be protected from back-flow either by air gap or back-flow prevention devices. There shall be no existing or potential cross-connection or back-siphonage problems anywhere in the school building or its premises.
- 10.5 Any water outlet with a threaded, serrated, or quick coupling nozzle, shall be provided with a vacuum breaker.

risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check

out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Water Supply

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Water becomes unsafe or there is a shortage due to low water pressure Fountains are not maintained Water is not being dispensed appropriately (not in good repair) There are not enough fountains Fountains are not constructed of the approved materials Water is overflowing in the bowl There is no a guard or it is not working correctly The drinking fountain basin has corners or there is a collection of dirt or other objectionable objects There is a direct physical connection with waste pipe Strainer is not available, wrong size, or clogged There are no single service cups available or not stored appropriately There is not a cover on water cooler The cover and/or water cooler is not clean or maintained There is dipping allowed at water cooler or individually owned cups are being reused by several individuals Water is not properly protected - There are no backflow prevention devices 	<ul style="list-style-type: none">   Provide approved individual bottled drinking water to every student seeking consumption of water     Use a monitoring system to monitor fountains    Report the issue  Install the appropriate number of functional water fountains and/or the placement of water coolers around school campus with the availability of single-use cups and a trash receptacle nearby  Procure durable fountains that are simple without electrical wiring  Use the 3Rs – Repair, Replace, Remove <ul style="list-style-type: none"> existing fountains to ensure they are constructed of an approved material Guards Strainer   Adjust the nozzle or pressure of water to issue correctly   Drain should be cleared to allow drainage; drain pipe should be unclogged if necessary    Fountain basin should be cleaned or replaced with a corner-less basin  Water fountain should be secured immediately, and plumbing should be corrected    Coordinate volunteer days  Submit a work order  Cordon off area

- Back-flow or cross-connection is occurring
- No nozzle or not appropriate
- No cold water
- No vacuum breakers
- Not draining properly
- Water pressure is too high

7. Handwashing Facilities

Critical Handwashing is possibly the least expensive and simplest method of preventing the transmission of infectious diseases. Handwashing can prevent food-borne illness, common cold, influenza, gastroenteritis (stomach flu), conjunctivitis, pinworm, and other diseases. Most illnesses are likely spread by hands and not through air by coughs and sneezes. By providing handwashing units with clean sinks and convenient soap and sanitary paper towels, students are more likely to practice effective handwashing. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

7a. Regulation – Handwashing Facilities



Interpreting the Regulation

A handwashing unit includes a sink, soap, soap dispenser, sanitary paper towels, and sanitary paper towel dispensers. Refer to the *Restroom Layout* in the *School Building Sanitation Toolkit* to learn more. Handwashing units should be located in restrooms and in, or adjacent to, classrooms for students in second grade and lower. The more accessible the units, the more opportunity students have to use them. The units must be clean to be effective and supplies need to be replenished on a regular basis. Paper towel dispensers are necessary to prevent

- 11.1 Handwashing facilities shall be located in the classroom or adjacent thereto in all grades from kindergarten to grade two (2), and in other rooms which require frequent handwashing.
- 11.2 Handwashing facilities shall be kept clean, maintained and shall be adequate in size and number to serve the total population of the school based on the following ratio:
 - 11.2.1 Elementary schools shall have at least one (1) lavatory for every 60 pupil.
 - 11.2.2 Secondary schools shall have at least one (1) lavatory for every 100 students.
- 11.3 Handwashing facilities shall be provided with cold water at least. If hot water also is provided at handwashing facilities, it must be combined with the cold water through a mixing faucet. The hot water shall have a maximum temperature of 120° Fahrenheit.
- 11.4 Soap and single-service towels shall be provided and made available at all times. A heated air hand-drying device may be used in place of single service towels. Common use towels are prohibited.
- 11.5 Handwashing facilities shall be conveniently located to toilet rooms.

the contamination of the sanitary paper towels. It further discourages unnecessary use and waste of the paper towels by dispensing a sheet at a time. Hot water is not required, but if it's available, it

must meet certain temperature requirements. Hand dryers may be provided in lieu of sanitary paper towels as permitted in the regulations. Trash containers must be provided even if hand dryers are used. An adequate number of sinks, based on student population, must be provided to promote their use and to ensure they are readily available when needed by students.

Why is this a Public Health Issue?








Handwashing with soap and running water is important after using the restroom to rid one's self of fecal-oral pathogens that may be present on the hands. Such pathogens include those that can cause Hepatitis A, norovirus, gastroenteritis, cholera, and many other infectious diseases, such as the common cold or influenza, that can cause outbreaks in schools. Sanitary paper towels are also an

important component of handwashing since it aids in the mechanical removal of any remaining pathogens on the hands and it discourages children from drying their hands on their clothes.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Handwashing

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Handwashing facilities are not available or are not in working order Not maintained (ex: facilities are not clean because of excessive dirt, rust, and/or mildew) Facilities are not maintained (ex: damages, holes, and old fixtures) They are not the adequate size There are not enough of them The hot water is scalding, more than 120 degrees Fahrenheit or no cold water Soap and towels are not available or not in the appropriate fixtures (ex: no soap/paper towels and no soap/paper towel dispensers) Devices are broken, are not 	<ul style="list-style-type: none">  For a temporary solution, provide commercial grade, portable handwashing unit(s) approved by DEH immediately outside the restroom that are of adequate number and readily accessible to students, including the required soap, sanitary paper towels, and trash receptacle  Use a monitoring system to monitor handwashing units for supplies and cleanliness  Report the issue  Work with student organizations – have students adopt a restroom  Create signs to promote clean handwashing units  Use the 3Rs – Repair, Replace, Remove all damaged/missing sinks and dispensers in restrooms and classrooms  Develop and implement custodial schedules to assure

maintained

- Common use towel are used
- Facilities are not conveniently located
- Excessive dirt/stains under sink(s)
- Inadequate amount of paper towels and soap dispensers
- Dispensers not being used
- Dispensers are not in good repair
- Remove dispensers no longer in use
- Contaminants in soap refill containers and dispensers

that the facility is kept clean and necessary supplies are always available



Assign an individual to conduct inspection rounds of all restrooms every 15 minutes during recess and lunch break and every half hour during instructional time; such routine inspection will also discourage vandalism and the intentional waste of handwashing supplies; records of such inspections and resultant actions should be maintained for accountability



Make a request for toiletries



Install and use approved, enclosed, water resistant box or container to house and dispense sanitary paper towels



Submit a work order



Cordon off area



Purchase and install soap dispensers that use refill soap packs

8. Shower and Locker Rooms

Shower rooms can easily attract mold with high relative humidity and poor maintenance. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

8a. Regulations – Shower and Locker Rooms

Interpreting the Regulation

Showers are required at schools that have athletic activities. There is a required ratio that must be met to ensure there are enough showerheads available during any given class. Utilize the *Ratios Worksheet* in the *School Building Sanitation Toolkit* to calculate the

12.1 Where athletic or gymnastic activities are conducted, showers shall be provided.

12.2 There shall be a minimum of one showerhead for each four (4) girls and one showerhead for each five (5) boys based upon maximum demand in any one period.

12.3 The floor of the shower room shall be of smooth finished material with nonslip surface impervious to moisture and sloped to the floor drain. Junctions between walls and floors shall be coved and sealed. Walls shall be water impervious up to showerhead heights. Upper walls and ceilings shall be of smooth, easily washable construction.




















12.4 Shower and locker rooms shall be kept clean and well ventilated and the lockers, showerheads and floors shall be kept in good repair.

appropriate ratios for your school. The floor needs to be in good repair to ensure adequate cleaning can take place and to avoid unintentional injury by a slip or fall. Floors should have drains that are working properly and cleaned on a regular basis. The walls need to be maintained to remediate any issues of mold growth.

Why is this a Public Health Issue?

When shower rooms and locker rooms are poorly ventilated to remove moisture, there is a greater chance of exhibiting higher amount of mold growth. Although mold can be found anywhere, excessive moisture in a building can make it more difficult to control mold growth. Mold can cause hay-fever like allergic symptoms, difficulty breathing, and infection²⁴.

Showers and Locker Rooms

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Shower are not provided or not in working order There are not enough showerheads or they are in disrepair The showerheads are clogged (not in good repair) The floors and/or walls not the appropriate material, absorbing liquid No drain or it is in disrepair Drain is clogged Junctions are not coved and sealed Upper walls and ceilings are not smooth and material is not clean or easily cleanable Shower and locker rooms are not maintained There is excessive dirt, rust, and mildew The rooms are not well ventilated Lockers are not in good repair 	<ul style="list-style-type: none">  Use the 3Rs – Repair, Replace, Remove damaged or fixtures that are no longer in good repair  Meet with custodial staff on a regular basis to ensure they are cleaned adequately  Make a request for more showerheads    Report the issue    Talk with students on respecting school property and doing their part  Submit a work order request to have shower rooms, locker rooms, or the equipment in them repaired or replaced     Dispose of unnecessary items in an appropriate way   Cordon off area    Use a monitoring system to ensure shower rooms and locker rooms are cleaned, and well-ventilated; keep an inventory of showerheads per class size

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

9. Toilet Facilities

Critical Maintaining good overall sanitation and operation of a toilet facility promotes good personal hygiene, thus reducing the possible transmission of infectious diseases, and also reducing unpleasant odors. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

9a. Regulation – Toilet Facilities

Interpreting the Regulation

Toilet facility or Restroom is inclusive of toilets, urinals, dispensers, and other necessary equipment and supplies found in restrooms except handwashing sinks and its supplies, which fall under a different category (Handwashing Facility). Refer to the *Restroom Layout* handout in the *School Building Sanitation Toolkit* to learn more. Similar to handwashing sinks, schools must provide adequate number of toilets and urinals based on school population by gender. Utilize the *Ratios Worksheet* located in the *School Building Sanitation Toolkit* to determine how many toilets and urinals are required for your school. The facility must also meet ventilation and lighting requirements. The toilet facility must be kept clean and well maintained to prevent the spread of infectious diseases and to encourage students to maintain its cleanliness.

Each toilet must have toilet paper available and conveniently located adjacent to each toilet. Storing toilet paper in the classroom, or the office, is not acceptable. Students experiencing diarrhea from food-borne illness, gastroenteritis, or other intestinal disease may not have sufficient time to

13.1 The following table establishes the minimum number of toilet fixtures for schools:

a) Elementary schools:

- Girls’ water closets – one for each 35 females
- Boys’ water closets – one for each 60 males
- Boys’ urinals – one for each 30 males

b) Secondary schools and higher institutions:

- Girls’ water closets – one for each 45 females
- Boys’ water closets – one for each 100 males
- Boys’ urinals – one for each 30 males

- 13.2 Toilet stools and urinals shall be of proper height for the pupils.
- 13.3 Separate toilet facilities for each sex shall be conveniently located.
- 13.4 Toilet facilities shall be provided in conjunction with shower or locker rooms.
- 13.5 Toilet doors shall be self-closing and shall be provided with signs designating the sex for which such room is intended.
- 13.6 Floors shall be of impervious material and floor drains shall be provided.
- 13.7 Each toilet facility shall be completely enclosed and shall have tightfitting, self-closing door. Toilet partitions shall begin not more than one (1) foot from the floor and extend to a height of not less than five (5) feet.

obtain toilet paper, which can lead to health and sanitation issues, not to mention embarrassment.

Although certain damage or deficiencies, such as peeling paint and missing floor tiles, may be viewed as minor violations, they nonetheless contribute to the over-all poor sanitation and maintenance of restrooms. Individual toilets are to be separated and enclosed (inclusive of doors) by partitions not more than 1 foot off the floor and not less than 5 feet high. Good lighting is necessary for cleaning of restrooms and aids in personal grooming and hygiene. The facility must have the light intensity of at least 10 foot-candles.






Why is this a Public Health Issue?

Inadequate ventilation of restrooms can result in the presence of unpleasant odor from waste and cleaning agents, promote the growth of mold, and increase air temperature. Regular cleaning to remove spills, leaks, and puddles in the facility can help minimize air moisture, thus reducing mold growth. Furthermore, high humidity can increase the rate of corrosion of metallic devices that may be found in restrooms, such as hand-dryers and mechanical vents.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found

Toilet

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> • There are not enough toilets • Toilets and urinals are not the appropriate height for the students • There are not separate facilities for males and females • Facilities are not available for use (locked) 	 Provide portable chemical toilets for a temporary solution
	  Report the issue
	 Submit work order requests to have issues repaired
	 Use the 3Rs – Repair, Replace, Remove

13.8 Toilet rooms shall have adequate ventilation and shall be mechanically or naturally vented to the outside.

13.9 Toilet rooms shall be well lighted either by natural or artificial means. There shall be at least 10 foot-candles of illumination.

13.10 Each toilet rooms shall be provided with an approved trash container.

13.11 All toilet rooms shall be kept in good repair, clean, and free from foul odor.




13.12 Toilet paper shall be available and conveniently located adjacent to each flush toilet.


in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

- There are no signs indicating gender designation
- Floors are not the appropriate materials and are absorbing liquids
- Drains are not provided or are not maintained
- Facilities are not enclosed
- Doors are not tightfitting and do not have a self-closing device
- Partitions are not the right size – does not meet height requirements
- There is inadequate ventilation
- Lighting is too dark
- There are not approved containers
- Containers are not maintained
- Containers are not emptied on a regular basis
- Rooms are not in good condition
- Toilet paper is not available
- Vandalism
- The fixture is broken
- No fixture
- Not maintained
- Excessive dirt/stains on stall door(s)
- There is no cover(s) for trash containers
- Remove dispenser(s) not being used
- Stall door(s) are not tight-fitting and self-closing
- Standing water
- Toilet paper dispenser(s) are not being used
- Toilet paper dispenser(s) are not in good repair
- Stall door(s) are missing or not in good repair
- Toilet(s) and/or urinal(s) not in good repair



 Cordon off areas


 Ensure there are signs of designated gender



   Use a monitoring system for the restrooms to ensure they are cleaned, well-ventilated; keep a log sheet of restrooms visited, time visited, actions taken during the visit, and turn into the main office at the end of the day (rotate daily)


 Meet with custodial staff on a regular basis to ensure restrooms are cleaned adequately

    Check partitions and install new doors

  Temporarily place portable fan(s) near entrance to circulate air and improve venting of facility




 Install appropriately-sized permanent mechanical device or provide adequate openings via windows, doors, etc. to permit the exchange of air


  Waste receptacle must be of appropriate size to reflect the number of handwashing sinks utilized within each facility; place the appropriate number and size of waste receptacles near handwashing sinks

 Assign an individual or individuals in every school to conduct inspection rounds every 15 minutes to ensure supplies are available and replenish as necessary

 Lock toilet paper dispensers

 Replenish supplies

   Make it a class activity – talk with students about vandalism, keeping restrooms clean, signing up to monitor, and reporting issues

 Purchase and install stainless steel single unit toilets and sinks, and vandal resistant toilet paper dispensers

 Staff frequently monitor restrooms to improve overall campus security

10. Garbage and Trash Disposal

Every aspect of garbage and trash disposal is necessary in order to maintain safe and sanitary conditions at schools. This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.


10a. Regulation – Garbage and Trash Disposal

Interpreting the Regulation

To improve the maintenance of grounds and buildings, approved garbage and trash containers must be available. A good rule of thumb to follow is providing at least one trash container in each classroom. Also, when walking around the grounds randomly stop and take a look around the area to identify the nearest container. If you do not see one, that means you need to add one to that area. All garbage containers need lids that are watertight and non-absorbent to avoid pest control issues. It is important to properly disinfect containers. Other strategies to keep unwanted pests away is to lift all garbage containers 18 inches from the ground and adding asphalt or concrete pads.

Why is this a Public Health Issue?

Inadequate maintenance of garbage and trash disposal can lead to pest control issues. Without a regular disposal system in place and adequate disinfecting techniques, garbage and trash can become a nuisance for the school, leading to health hazards and the harborage of vermin.




















- 
- 14.1 Every school shall provide an adequate number of garbage and trash containers with tight-fitting lids which shall be located at a place suitable for their use. Containers with self-closing lids shall be constructed in such a way that accidents cannot occur from faults of the apparatus itself.
 - 14.2 Watertight and non-absorbent containers shall be used for storing garbage. Garbage containers shall be washed and treated with a disinfectant as often as may be necessary to prevent nuisances. The disinfectant used in such containers shall contain at least 100 ppm of chlorine or its equivalent of an acceptable bactericide.
 - 14.3 Garbage, trash, and other solid wastes shall be disposed of regularly.
 - 14.4 Trash and solid waste shall be disposed of in an approved landfill of garbage or refuse disposal system approved by Public Health so as not to create a nuisance or health hazard.
 - 14.5 Trash cans or barrels shall be elevated to at least 18 inches from the ground surface and the areas around the containers shall be kept clean so as not to serve as harborage for vermin. Bulk refuse containers shall be located on impervious asphalt or concrete surfaces sloped to drain into an approved sewage disposal system.
 - 14.6 Garbage intended for use as animal feed shall be stored according to regulations separately established for feeding of garbage to livestock.

Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measure and Solutions

section to help you and your team address the issue(s). Do not forget, it just takes one issue to receive a violation and be considered noncompliant. Check out the *How to Use the School Sanitation Checklists* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Garbage and Trash Disposal

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> • There are not enough garbage or trash containers • The lids are not tight-fitting • Trash is overflowing • Containers are absorbent • They are not washed and treated with disinfectant on a regular basis • They are using the wrong disinfectant • Not being disposed of regularly • Not approved disposal method • They are not elevated 18 inches • Not on concrete or asphalt • There are no drains • Trash container needed for recycling 	    Report the issue – <ul style="list-style-type: none"> • lack of containers • unapproved containers • lack of cleanliness • observations of ineffective cleaning methods
	 Submit work order requests to purchase new lids and/or containers
	  Use the 3Rs – Repair, Replace, Remove
	   Conduct a survey or environmental scan to determine if there are enough containers and if they are appropriately placed
	 Talk with custodial staff to clean containers more frequently and discuss appropriate cleaning methods
	  Purchase more containers
	    Coordinate volunteer days to pour concrete slab
	 Submit a work order request to add effective drainage method
	 Move refuse containers to concrete or asphalt

11. Safety

Students are sent to schools to learn valuable lessons that will guide them and they deserve to learn these lessons in a safe environment, which includes a safe and sanitary school. From effective placement of first aid kits to safe playground equipment, measures should be in place to provide an ideal atmosphere for learning.

This section will outline what factors are considered a violation during an inspection, known as common issues, and provide guidance on steps schools can take to minimize objectionable conditions.

11a. Regulation – Safety

Interpreting the Regulation

First aid kits should be available to teachers and students as needed. It is important that teachers and students know how and where to access kits. There are different kits available, but the Red Cross is a good starting point in organizing your kit.

Why is this a Public Health Issue?

Having first aid kits readily available can help to prevent minor injuries from becoming major injuries²⁵. Playgrounds can be an area of particular concern as dirt and animal feces from equipment can be transferred to wounds²⁶.
















Time to Investigate

Now it is time to take matters into your own hands. Below is a list of common issues that can be found in a school setting related to this section of the regulations. Utilize this list as you inspect your school. If you find that your school has one or more, or is at risk of having one or more, of these issues occur, use the Prevention Measures and Solutions sections to help you and your team address the issue(s). Do not forget, it just takes one issue to

- 16.1 Each school building shall have first aid material available and accessible.
- 16.2 The Red Cross first aid manual (current edition) or similar recognized first aid manuals are recommended as guides on technique.
- 16.3 Fire extinguishers shall be provided as required by the Department of Public Safety.
- 16.4 All doors to the outside shall open outward and should be equipped with panic latches.
- 16.5 Fire drills are recommended to be held at regular intervals and at least once a month is recommended.
- 16.6 All playground equipment should be inspected frequently to detect defects, and when found, it should be dismantled or placed out of service until repaired or replaced.

receive a violation and be considered noncompliant. Check out *the How to Use the School Sanitation Checklist* and checklist templates in the *School Building Sanitation Toolkit* as a great tool to use when inspecting your school.

Safety

Common Issues	Prevention Measures and Solutions
<ul style="list-style-type: none"> Materials are not available or accessible No fire extinguishers or not in the right location or expired or obstructed (not mounted) Doors do not open outward No panic latches Playground equipment is not inspected, or it is damaged 	<ul style="list-style-type: none">  Make staff aware through emails, newsletter, or walk-through about the location of first aid materials     Make sure you know where the first aid kit is located; if you feel the kit is too far from your room, request that a kit be made for your room or building  Use a monitoring system to check the location and expiration of fire extinguishers and to monitor playgrounds  Make sure your fire extinguisher is not obstructed by desks, bookshelves, or other furniture    Report the issue <ul style="list-style-type: none"> fire extinguisher that is obstructed or not mounted to the wall doors are not opening outward or do not have panic latches  Use the 3Rs – Repair, Replace, Remove  Submit a work order request for a new door if the door does not open outward or does not have a panic latch   Cordon off areas  Make a request for new playground equipment

12. Dining Area

Currently, there are no specific sections within the regulations pertaining to the dining area of schools. The dining room and cafeteria are both regulated by the Guam Food Code; however, if the dining area is used in ways other than the intended use of dining, it can be considered a multipurpose room and it falls under the regular school building regulations. Best practice is to monitor the dining area and utilize both the Guam Food Code and the school building regulations.

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