

Clearwater Campus

Facilities Operation and Technical Infrastructure

Maintenance Plan



Pinellas Technical College, Clearwater Campus

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Table of Contents

Overview	3
Plant Operations Personnel	3
IT Personnel	4
Non-Instructional Equipment & Supplies	4
Safety Data Sheets	6
Technical Infrastructure	7
Compliance with Relevant State Laws, Federal Codes, and Procedures	13
Applicable Federal Code & Procedures	14
Plan Availability and Review	22
Handbook Supplement:Cleaning Protocols	23

Overview

Pinellas Technical College - Clearwater Campus (PTC-CLWTR) has developed this plan to address the operation, maintenance, and improvement of the physical plant and technical infrastructure for all PTC-CLWTR campuses, including Pinellas Technical College - Clearwater Campus - Pinellas High Innovation. The operation and maintenance of physical plants at Pinellas Technical College - Clearwater Campus are managed through the Pinellas County School Maintenance Department, a team of professionals whose dedication and continuous improvement efforts are integral to our mission. Their mission is to provide "a high-performing workforce to maintain a safe learning environment for students, faculty, and community". They accomplish this through an emphasis on professionalism, quality control, highly trained staff, safety, effective communication, and preventative maintenance.

Regular inspections are conducted at all school district facilities to ensure federal, state, and local codes are met. If recommendations or deficiencies result from inspections, our Pinellas Technical College-Clearwater Campus, staff works closely and collaboratively with the Head Plant Operator (HPO) and the district Facilities Services Department to meet the requirements and recommendations of the inspection, ensuring that everyone's expertise and input is valued.

The enhancements to the physical facilities at Pinellas Technical College - Clearwater Campus are carefully budgeted and managed by the Operational Services Division of Pinellas County Schools, located at the Walter Pownall Service Center (WPSC). The WPSC allocates an annual budget to the Plant Operations department for the purpose of purchasing supplies and maintaining equipment. In addition to this, the campus has a Discretionary Fund that is utilized for certain supplies and other expenses not covered by the WPSC. This fund also supports projects aimed at beautifying the campus, demonstrating our commitment to creating a pleasant and conducive learning environment.

Plant Operations Personnel

On campus, the head plant operator (HPO) manages ten (10) Plant Operations personnel who provide routine maintenance, such as grounds maintenance, lawn mowing and edging, building cleaning, package delivery, light carpentry work, carpet cleaning, etc. Maintenance beyond those mentioned are met by the Pinellas County School Maintenance Department and/or contracted vendors.

Pinellas Technical College - Clearwater Campus, plant operations staff utilize the Asset Essentials for Education online service request system to track, manage, and prioritize facility needs.

Additionally, campus work orders are tracked in-house via an HPO-created spreadsheet based on location and maintenance required. The HPO works with the district Facilities Services Department to complete service requests that are beyond their scope of practice.

IT Personnel

The IT staff of Pinellas Technical College - Clearwater Campus manages all staff and student access to our domain and networks. They work closely with district IT staff to ensure Pinellas Technical College - Clearwater Campus is operating with a safe and adequate infrastructure. The IT staff of the Pinellas County School Board and Pinellas Technical College Clearwater Campus holds credentials in the following areas: server infrastructure, desktop infrastructure, private cloud, enterprise devices and apps, data platform, business intelligence, messaging, communication, and the Blackboard Learn system. This allows direct knowledge regarding best practices in technology infrastructure.

Pinellas Technical College - Clearwater Campus employees and students are provided with credentials to access the PTC-CLWTR and PCS networks and are provided server space to store digital materials. When an employee is no longer a staff member or when a student is no longer enrolled, their access to the server and network is revoked.

Non-Instructional Equipment & Supplies

Pinellas Technical College - Clearwater Campus has developed this plan to ensure appropriate and necessary equipment and supplies are available for staff to operate and maintain the campus's physical plant and technical infrastructure.

Plant Operation and district facilities staff have adequate supplies on hand or available to ensure the physical facilities' operation and maintenance. Supplies are purchased as needs arise through the Walter Pownall Service Center (WPSC) warehouse. An outside approved vendor is used if an item is unavailable in the warehouse.

Pinellas County Schools Information Technology Governance Request for Purchase

INITIAL REQUEST

School or district personnel can request a purchase using the Asana platform to access the Technology/Software Purchase Request form.

SOFTWARE

The request will be reviewed and either approved or denied. The approver can choose to approve and:

1) send to hardware,

2) bypass hardware and move to legal, or

3) bypass both hardware and legal and move to purchasing.

HARDWARE

The request will be moved to the hardware section in Asana for review and either approved or denied. The approver can choose to approve and send to legal or bypass and move to purchasing.

LEGAL

When prompted by the approver, the request will be reviewed and either approved or denied. The request will move to the legal section in Asana for review. Once the documents are received from the requester, Legal will update the status. The requester will be prompted to complete the Request for Legal Services form.

PURCHASING

The request will be reviewed and either approved or denied, which will move the request to the appropriate place in Asana. The Purchase Order Number will be added to the Asana task once approved.

DENIED

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Any approver can place an item as Denied by selecting the option in the drop-down. This indicates that more information is needed and will initiate a conversation with the appropriate approver. Once resolved, the request can be approved to move to the subsequent section.

PENDING

Any approver can place an item as pending by selecting the option in the drop-down. This indicates that more information is needed and will initiate a conversation with the appropriate approver. Once resolved, the request can be approved to move to the subsequent section.

APPROVED

Each approver must approve at their level. Final approval is at the purchasing level. Once approved, the request will move to the Approved section in Asana.

Safety Data Sheets

Safety Data Sheets (SDS) containing information on the safe handling and use of materials used by school maintenance personnel are easily accessible to staff and faculty through the HPO and Night Foreman. The SDSs are available in the maintenance department (Building 13) and Building 2 Administration.

Moreover, Safety Data Sheets for materials used by individual programs are kept in the classroom or workshop of the respective program area. These SDSs are readily available to staff and faculty through the program instructor.

Technical Infrastructure

Data Centers: Pinellas Technical College - Clearwater Campus's information systems infrastructure (servers, networking equipment, etc.) for the distance learning management system is in a server facility off-site (may be one of the various locations throughout the US) due to our managed hosting/SaaS system configuration. Some limited-use servers are secured at the district level and housed at the Pinellas County School Board's secure data center, where district staff monitor and maintain them.

Data Center Security: The Pinellas County School Board's data center is surveilled 24 hours a day, seven days a week. Access is fully secured with district security entry requirements.

Environmental Controls: All district and Pinellas Technical College - Clearwater Campus IT facilities are maintained at controlled temperatures and humidity ranges and continuously monitored for variations. Smoke, fire detection, and response systems are in place. Distance learning data is housed in a secure data facility in Virginia due to our managed hosting/SaaS configuration and is maintained under the same strict conditions as those provided by the district.

Back-Ups: Back-Ups are performed daily at the off-site storage facility provided through our managed hosting/SaaS solution. All back-ups have storage on and off-site. On-site back-ups are performed on an annual basis.

Privacy, Safety & Security of Data: Acceptable Use Policy for Distance Education

The information technology (IT) staff of the Pinellas County School Board (PCS) and Pinellas Technical College - Clearwater Campus (PTC-CLWTR) holds credentials in the following areas: server infrastructure, desktop infrastructure, private cloud, enterprise devices and apps, data platforms, business intelligence, messaging, communication, and the Blackboard Learn system. This allows direct knowledge regarding best practices in technology infrastructure.

Data Storage & Network Access

The Pinellas Technical College - Clearwater Campus (PTC-CLWTR) IT Department manages all staff and student access to the distance learning management systems. They work closely with the Pinellas County School Board (PCS) IT staff to ensure that PTC-CLWTR is operating with a safe and adequate infrastructure.

PTC-CLWTR employees and students are provided credentials to access the PTC-CLWTR and PCS networks and server space to store digital materials. When an employee is no longer a staff member or a student is no longer enrolled, their access to the server and network is revoked.

Network Reliability

The PCS Management Information Systems department monitors and maintains network infrastructure, including routers, switches, wireless access points, patch panels, fiber, and network cabling.

Privacy, Safety, & Security Application and User Security

User Authentication: User data on our database is logically segregated by account-based access rules. User accounts have unique usernames and passwords that must be entered each time a user accesses the system.

User Passwords: User application passwords have minimum complexity requirements.

Data Encryption: Certain sensitive user data, such as account passwords, are encrypted. *Physical Security*

The distance education infrastructure required for the learning management system (LMS) is provided as part of the agreement with the vendor who supplies the LMS to Pinellas Technical College - Clearwater Campus (PTC-CLWTR) on a multi-year contractual basis. This off-site infrastructure includes the servers, security, storage (including archival storage), and support.

Data Centers: Due to our managed hosting/SaaS system configuration, PTC-CLWTR's distance education information systems infrastructure (servers, networking equipment, etc.) for the learning management system is maintained in a server facility off-site (it may be one of the various locations throughout the United States). Some limited-use servers are secured at the district level and housed at the Pinellas County School Board's secure data center, where they are monitored and maintained by Pinellas County School Board district staff.

Data Center Security: The Pinellas County School Board's data center is surveilled 24 hours a day, seven days a week. Access is fully secured with district security entry requirements.

Environmental Controls: All Pinellas County School Board and PTC-CLWTR information technology dedicated data storage facilities are maintained at controlled temperatures and humidity ranges, which are continuously monitored for variations. Smoke and fire detection, as well as response systems, are in place.

Due to our managed hosting/SaaS configuration, distance education data is housed in a secure data facility in Virginia and maintained under the same strict conditions as those provided by the district.

Back-Ups: Back-Ups are performed daily at the off-site storage facility provided through our managed hosting/SaaS solution. All back-ups have storage on and off-site. On-site back-ups are performed on an annual basis.

Responsibilities of Institution

The information technology (IT), instructional and administrative staff members of Pinellas Technical College - Clearwater Campus (PTC-CLWTR) hold credentials in those areas of expertise that determine their responsibility to ensure the quality of distance education offered by the institution.

IT Staff Responsibility

The PTC-CLWTR IT Department will maintain equipment designated for student use, support the network (local and district), and work with the Pinellas County Schools staff to ensure access to resources. They will communicate during periods of downtime and will provide appropriate technical support at all levels, as requested by the instructional faculty. The IT staff for PTC-CLWTR also assumes responsibility for verifying and maintaining the currency and quality of all contracted courseware on both an annual and ongoing basis and preserving curriculum oversight responsibility – in partnership with PTC-CLWTR faculty and administration – within all contracts..

Instructional Faculty Responsibility

The PTC-CLWTR instructional faculty members will provide access to a high-quality distance education curriculum aligned with state and industry standards. PTC – CLWTR faculty members will provide initial training on the use of the learning management system (LMS) through an introduction and orientation to the LMS during campus orientation, providing resources for the use of the LMS, and by specific familiarization with LMS features and content relevant to the enrolled course. The institution ensures timeliness of its responses (synchronously or asynchronously) to students' requests by placing a requirement on response time of no more than twenty-four hours. Each course/program uses a standardized template within the LMS, course descriptions and learning objectives, course requirements (e.g., standard syllabus, outcomes, grading policy, content resources, etc.), and learning outcomes to ensure the quality and assessment of student academic performance. An advisory panel of industry members will review the curriculum and use instructional materials representing up-to-date and relevant theories within the discipline. The instructors and administrators will continually evaluate courses to ensure that the elements of high-quality and standards-aligned online coursework are in place.

Authentication of Academic Submissions & Examinations

PTC-CLWTR has several systems in place to ensure that academic submissions received from, and examinations administered to students are completed by the same student who has registered for that course or program of study. Students are required to agree, in writing, to standards of academic integrity and to adhere to specific codes of student conduct; in addition, all students at Pinellas County Schools are required to sign an agreement for Network/Internet Acceptable Use, prior to being permitted access to any electronic resources.

PINELLAS COUNTY SCHOOLS

NETWORK/INTERNET ACCEPTABLE USE AGREEMENT

Pinellas County Schools use computers to support learning and to enhance instruction. Computer networks in the schools allow students and staff to interact with many computers. The Internet, a network of networks, allows people to interact with hundreds of thousands of networks and computers. Internet access is now available to designated students in Pinellas County Schools. This resource offers vast, diverse, and unique resources to students that will allow them to communicate with people from around the world, visit electronic libraries, perform research on a variety of subjects, and participate in special projects with students from all points on the globe. The goal in providing this service is to promote educational excellence in schools by facilitating resource sharing, innovation, and communication. This technology will benefit all students as they prepare for work in a global marketplace.

The student is expected to follow all guidelines stated below, as well as those given orally by the staff, and to demonstrate ethical behavior that is of the highest order in using the network facilities at the school.

1. Acceptable Use

The purpose of the Internet is to facilitate communications in support of research and education by providing access to unique resources and the opportunity for collaborative work. The use of the student's account must be in support of and consistent with the educational objectives of Pinellas County Schools. Use of other organizations' networks or computing resources must comply with the rules appropriate for that network. Transmission of any material in violation of any U.S. or state regulation is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret. Use for commercial activities is generally not acceptable. Use for product advertisement is also prohibited. It is prohibited to download or install unauthorized applications or alter the basic configuration of the computer. It is also prohibited to execute any unauthorized applications from a third-party device (hard drives, USB drives, etc.).

2. Privileges

The use of the Internet is a privilege, not a right, and inappropriate use will result in a cancellation of those privileges. The districtwide network system administrator is the supervisor of distributive and user support systems. In addition, the principal will appoint a staff member to act as the school's network system administrator. Students may not allow others to use their account name or their password. Violation of this rule could jeopardize access to the Internet and students who violate this rule will immediately lose all network and computer access. The school's network system administrators will deem what is inappropriate use and their decision is final. Also, the school's network system adminiistrators may close or restrict an account at any time as required. The administration and staff of the district or the school may also request the districtwide network system administrator or the school's network system administrator to demy, revoke, or suspend specific user access.

3. Network Etiquette

Students are expected to abide by the generally accepted rules of network etiquette. These include, but are not limited to the following:

- a. Do not reveal personal address, phone numbers, or other personal information of yourself or classmates.
- b. Be polite. Do not get abusive in messages to others.
- c. Use appropriate language. Do not swear, use vulgarities, or any other inappropriate language.
- Do not engage in activities that are prohibited under state or federal law.
- e. Do not assume that electronic mail is private. People who operate the system do have access to all mail. Messages relating to or in support of illegal activities may be reported to the authorities.
- f. Do not use the network in such a way that would disrupt the use of the network by other users.
- g. All communications and information accessible via the network should be assumed to be private property.

4. Services

- a. Pinellas County Schools will not be responsible for any charges related to fee for service access to on-line resources services incurred by account holders without prior written approval being received from the district.
- b. Pinellas County Schools makes no warranties of any kind, either expressed or implied, for the service it is providing. Pinellas County Schools will not be responsible for any damages suffered. This includes loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruptions caused by its own negligence or errors or omissions including any and all viruses. Use of any information obtained via the Internet is at the student's own risk. Pinellas County Schools specifically denies any responsibility for the accuracy or quality of information obtained through its services.

PCS Form 2-2695 (Rev. 5/23) Page 1 of 2	Category C
Review Date 5/24	CC # 5280

5. Security

Security on any computer system is a high priority, especially when the system involves many users. If the student can identify a security problem, the student must notify the school's network system administrator or the Pinellas County Schools districtwide network system administrator and should not demonstrate the problem to other users. Attempts to logon to the Internet as a network system administrator will result in cancellation of user privileges. Any user identified as a security risk or having a history of problems with other computer systems may be denied access to the Internet.

6. Vandalism

Vandalism will result in cancellation of Internet privileges. Vandalism is defined as any malicious attempt to harm or destroy data of another user, Internet, or any of the above listed agencies or other networks that are connected to Pinellas County Schools. This includes, but is not limited to the uploading or greation of computer viruses.

STUDENT

I understand and will abide by the Network and Internet Use Agreement. I further understand that any violation of the regulations stated is unethical and may constitute a criminal offense. Should I commit any violation, my access privileges may be revoked and school disciplinary and appropriate legal action may be taken.

Student Name		School		
	(please print)			
Student Signati	ure		Date	

PARENT OR GUARDIAN

As the parent or guardian of this student, I have read the Network and Internet Use Agreement. I understand that my child's access is designed for educational purposes. I recognize it is impossible for Pinellas County Schools to restrict access to all controversial or offensive materials and I will not hold them responsible for materials acquired on the network. Further, I accept full responsibility for the supervision, if any, when my child's use is not in a school setting. I have read and understand the information in this agreement and hereby give my permission for my child to use the Internet pursuant to the terms of this agreement.

Parent or Guardian's Name (please print)

Parent or Guardian's Signature

Date

PCS Form 2-2695 (Rev. 5/23) Page 2 of 2 Review Date 5/24 Category C CC # 5280

11

Processes Used to Ensure Authentication

When students register as students at Pinellas Technical College - Clearwater Campus (PTC-CLWTR) and enroll in one of the many programs offered, they are registered by the school's guidance professionals and enrolled in the student information system (SIS) by the student records specialist. They are required to provide two forms of official identification, to establish identity and proof of residence, to register. When they are enrolled in the program, in the SIS, they are provided with a unique student identification number. Students are further enrolled in their distance education/learning management system (LMS) programs by the LMS administrator, using a report created solely for this purpose in the SIS. The report is generated in the SIS and uses the same information from the SIS used for registration and enrollment, including the unique student identification number. A unique username and password combination is established for each student, which is provided to the program instructor for distribution to students in the enrolled cohort. Usernames are unique and cannot be changed once created; passwords are irretrievable and must be reset if/when necessary. Students are advised in orientation, and during introduction to the LMS, that log-in credentials are to be kept confidential and sharing of log-in information may be a violation of academic integrity. All student activity in the LMS is continually monitored by faculty, as well as by administration, in addition to reports being provided by the LMS administrator upon request; this information includes log-in time, log-in frequency, course activity, coursework submission activity, confirmation of student time online, and percentage of coursework completed, in addition to any other relevant or requested data.

Off-Site Exam Administration

When online students are required to take tests at a location other than at a PTC-CLWTR, distance education instructional personnel have several options for securing the test, including:

- Requiring the use of a separate password to access the examination
- Timing the exam
- Setting the exam to "turn on" and "turn off" within specific time frames
- Randomizing questions for each re-examination
- Limiting the location where the exam can be taken, based upon the IP address

On-Site Exam Proctoring

For added security, distance education instructional personnel also schedule on-site exams for students, and secure testing locations for those students to test when they arrive on-campus. In addition, there are testing centers on campus that have been established for specific industry certification testing purposes with certified proctors, to ensure the validity and authentication of such examinations, as required by the testing bodies.

Students must schedule these tests in advance, and present valid photo identification before being permitted to test.

Compliance with Relevant State Laws, Federal Codes, and Procedures

Section 235.185, Florida Statutes, defines the legal and statutory requirements for operating and maintaining school and community college facilities throughout the state. As part of the five-year requirement for a district facility work program, this legislation further establishes the authority of local school boards and the State Board of Community Colleges to spend public funds "...to adequately provide for the maintenance of the educational plant and ancillary facilities".

Section 5(1) of the Florida State Requirements for Educational Facilities mandates that local school boards and community colleges establish "... policies and procedures for the maintenance, sanitation, and housekeeping of existing facilities to ensure the health of its

occupants". Relative to this requirement, these rules also establish many general criteria for various maintenance and operations functions - from assessing existing physical conditions to maintaining sanitary standards.

Further, all Pinellas County School facilities will be built following the Florida building code and Occupational Safety and Health Standards (OSHA).

Applicable Federal Code & Procedures

The following list of code sections is deemed relevant to the ordinary operation and maintenance of physical plants in Florida school districts and community colleges. The listed codes and standards are current when these guidelines are written and subject to change.

National Fire Protection Association (NFPA) Codes

- 10 Portable Extinguishers
- 11 Foam Ext. Systems
- 12 Carbon Dioxide Systems
 - 13 Standard for Installation of Sprinkler Systems
 - o 13A Sprinkler Maintenance
 - o 13E Sprinkler Prop., F. D. Operations
- 14 Standpipe, Hose Systems
- 20 Centrifugal Fire Pumps
- 24 Private Fire Service Mains
- 30A Automotive and Marine Service Station Code

- 31 Oil Burning Equipment
- 37 Combustion Engines
- 40 Motion Picture Film
- 45 Labs Using Chemicals
- 46 Forest Products, Storage
- 50 Bulk Oxygen Systems
- 51 Welding and Cutting
 - 51B Welding Processes
- 52 CNG Vehicular Fuel Systems
- 54 National Fuel Gas Code
- 56F Nonflammable Medical Gases
 - 56HM Home Respiratory Therapy
- 58 LP–Gas Storage Use
 - 59 Utility LP-Gas Plant Code
 - o 59 HP-Gas, Utility Plants
 - o 59A LN-Gas, Storage, Handling
 - 70 National Electrical Code
 - o 70B Electrical Equipment Maintenance
 - o 70E Employee Electrical Safety
- 71 Central Station Sig.
 - 72 National Fire Alarm and Signaling Code
 - o 72A Local Protect. System
 - o 72B Auxiliary Sig. System
 - o 72C Remote Station System
 - o 72D Proprietary Stg. System
 - 72E Auto. Fire Detectors
 - o 72F Emergency Voice/Alarm Comm. Systems
- 75 Electronic Computer System
- 78 Lightning Protection System
- 79 Electrical Standards for Industrial Machinery
- 80 Fire Doors, Windows
 - 85 Boiler and Combustion Systems Hazards Code

- 85A Single Burner Boiler-Furnaces
- o 85B Gas Multi-Burner Boiler
- o 85D Oil Multi-Burner Boiler
- 86 Ovens and Furnaces
 - 88 Standard for Parking Structure
 - o 88A Parking Structures
 - o 88B Repair Garages
 - 90 Standard for the Installation of Air-Conditioning and Ventilating Systems
 - 90A Air Conditioning Systems
 - o 90B Warm Air Heating, Air Conditioning
- 91 Blower and Exhaust System
- 96 Vapor Removal Cooking Equipment
- 97M Heating Terms, Glossary
- 99 Health Care Facilities
- 101 Life Safety Code
- 110 Emergency and Standby Power System
- 171 Public Fire Safety Symbols
- 172 Fire Safety Symbols for Architectural and Engineering Drawings
- 203M Roof Coverings
- 204M Smoke, Heat Venting
- 231C Rack Storage of Materials
- 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations
- 253 Flooring Radiant Panel Test
- 664 Wood Processing, Woodworking
- 901 Uniform Coding for F. P.
- 910 Libraries and Library Collections
- 911 Museums and Museum Collection and others as they may apply.

Standard Building Codes

- A. Standard Mechanical Code
- B. Standard Gas Code
- C. Elevator Safety Code

Florida Center for Community Design + Research 229

Those sections of OSHA 29 CFR that are applicable to maintenance and operations practices at the time this publication is written include the following: Part 1910 – Occupational Safety and Health Standards

Subpart A – General 1910.1 Purpose and scope 1910.2 Definitions 1910.3 Amendments to this part 1910.5 Applicability of standards

Subpart B – Adoption and Extension of Established Federal Standards
1910.11 Scope and purpose
1910.12 Construction work
1910.19 Special provisions for air contaminants

Subpart D – Walking - Working Surfaces 1910.19 Manually propelled mobile ladder stands and scaffolds 1910.21 Definitions 1910.22 General requirements 1910.23 Guarding floor and wall openings 1910.24 Fixed industrial stairs 1910.25 Portable wooden ladders 1910.26 Portable metal ladders 1910.27 Fixed ladders 1910.27 Fixed ladders 1910.28 Safety requirements for scaffolding 1910.30 Other working surfaces Subpart E – Means of Egress 1010.35 Definitions

1910.36 General requirements

1910.37 Means of egress, general

1910.38 Employee emergency plans and fire prevention plans

Subpart F – Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms 1910.66 Powered platforms for building maintenance 1910.67 Vehicle-mounted elevating and rotating work platforms 1910.68 Manlifts

Subpart G - Occupational Health and Environmental Control

1910.94 Ventilation

1910.95 Occupational noise exposure

Subpart H – Hazardous materials

1910.101 Compressed gasses (general requirements) 1910.102

Acetylene

1910.103 Hydrogen

1910.104 Oxygen

1910.105 Nitrous oxide

1910.106 Flammable and combustible liquids

1910.107 Spray finishing using flammable and combustible materials

1910.119 Process safety management of highly hazardous chemicals

1910.120 Hazardous waste operations and emergency response

230 Florida Center for Community Design + Research Subpart

I – Personal Protective Equipment

1910.132 General requirements

1910.133 Eye and face protection

1910.134 Respiratory protection

1910.135 Head protection

1910.136 Foot protection

1910.137 Electrical protective devices

1910.138 Hand protection

Subpart J – General Environmental Controls

1910.141 Sanitation

1910.144 Safety color code for marking physical hazards 1910.145

Specifications for accident prevention signs and tags 1910.146

Permit required confined spaces

Subpart K - Medical and First Aid 1910.151 Medical services and first aid

Subpart L – Fire Protection
1910.154 Scope, application, and definitions
1910.157 Portable fi re extinguishers 1910.158
Standpipe and hose systems 1910.159
Automatic sprinkler systems
1910.160 Fixed extinguishing systems, general
1910.161 Fixed extinguishing systems, dry chemical
1910.162 Fixed extinguishing systems, gaseous agent
1910.163 Fixed extinguishing systems, water spray and foam
1910.164 Fire detection systems
1910.165 Employee alarm systems

Subpart M – Compressed Gas and Compressed Air Equipment 1910.169 Air receivers

Subpart N – Materials Handling and Storage

1910.176 Handling material – general

1910.177 Servicing multi-piece and single piece rim wheels

1910.178 Powered industrial trucks

1910.184 Slings

Subpart O - Machinery and Machine Guarding

1910.211 Definitions

1910.212 General requirements for all machines

1910.213 Woodworking machinery requirements

1910.215 Abrasive wheel machinery

Subpart P - Hand and Portable Powered Tools and Other Hand-Held Equipment

1910.241 Definitions

1910.242 Hand and portable powered tools and equipment

1910.243 Guarding of portable powered tools

1910.244 Other portable powered tools and equipment

- Subpart Q Welding, Cutting and Brazing 1910.251 Definitions 1910.252 General requirements
- 1910.253 Oxygen-fuel gas welding and cutting
- 1910.254 Arc welding and cutting

Florida Center for Community Design + Research 231 Subpart

- S Electrical
- 1910.301 Introduction
- 1910.302 Electric utilization systems
- 1910.303 General requirements 1910.304
- Wiring design and protection
- 1910.305 Wiring methods, components, and equipment for general use
- 1910.306 Specific purpose equipment installations
- 1910.307 Hazardous locations
- 1910.308 Special systems
- 1910.331 Safety-related work practices scope
- 1910.332 Training
- 1910.333 Selection and use of work practices
- 1910.334 Use of equipment
- 1910.335 Safeguards for personal protection
- 1910.399 Definitions

Subpart Z – Toxic and Hazardous Substances

- 1910.1001 Air contaminants
- 1910.1001 Asbestos
- 1910.1020 Access to employee exposure and medical records
- 1910.1030 Blood borne pathogens
- 1910.1200 Hazard communication
- 1910.1201 Retention of DOT markings, placards, and labels
- 1910.1450 Occupational exposure to hazardous chemicals in laboratories

Part 1926 – Safety and Health Regulations for Construction
Subpart A - General
1926.1 Purpose and scope
1926.2 Variances from safety and health standards
1926.3 Inspections – right of entry
1926.4 Rules of practice for administrative adjudications for enforcement of

Safety and health standards

Subpart B – General Interpretations

1926.10 Scope of subpart

1926.16 Rules of construction

Subpart C - General Safety and Health Provisions

1926.20 General safety and health provisions 1926.21

Safety training and education

1926.22 Recording and reporting injuries

1926.23 First aid and medical attention

1926.24 Fire protection and prevention

1926.25 Housekeeping

1926.26 Illumination

1926.27 Sanitation

1926.28 Personal protective equipment

1926.29 Acceptable certifications

1926.32 Definitions

1926.33 Access to employee exposure and medical records

1926.34 Means of egress

1926.35 Employee emergency action plans

Subpart D - Occupational Health and Environmental Controls

1926.50 Medical services and first aid

1926.51 Sanitation

1926.52 Occupational noise exposure

1926.55 Gases, vapors, fumes, dusts, and mists

1926.56 Illumination

1926.57 Ventilation

Updated: 1 May 2024

1926.59 Hazard communication
1926.61 Retention of DOT markings, placards, and labels
1926.62 Lead
1926.64 Process safety management of highly hazardous chemicals
1926.65 Hazardous waste operations and emergency response 1926.66
Criteria for design and construction of spray booths

Subpart E – Personal Protective and Life Safety Equipment
1926.95 Criteria for personal protective equipment 1926.96
Occupational foot protection
1926.100 Head protection
1926.101 Hearing protection 1926.102 Eye and face protection 1926.103 Respiratory protection
1926.104 Safety belts, lifelines, and lanyards
1926.105 Safety nets
1926.106 Working over or near water 1926.107
Definitions applicable to this subpart
Subpart F – Fire Protection and Prevention

Subpart F – Fire Protection and Prevention
1926.150 Fire protection
1926.151 Fire prevention
1926.152 Flammable and combustible liquids
1926.153 Liquefied petroleum gas (LP gas)
1926.154 Temporary heating devices 1926.155
Definitions applicable to this subpart 1926.156
Fixed extinguishing systems, general
1926.157 Fixed extinguishing systems, gaseous agent
1926.158 Fire detection systems
1926.159 Employee alarm systems

Subpart G – Signs, Signals and Barricades
1926.200 Accident prevention signs and tags
1926.201 Signaling
1926.202 Barricades
1926.203 Definitions applicable to this subpart.
Updated: 1 May 2024

Subpart H – Materials Handling, Storage, Use and Disposal
1926.250 General requirements for storage
1926.251 Rigging equipment for materials handling
1926.252 Disposal of waste materials

232 Florida Center for Community Design + Research Subpart
I – Tools – Hand and Power
1926.300 General requirements
1926.301 Hand tools
1926.302 Power operated hand tools
1926.303 Abrasive wheels and tools
1926.304 Woodworking tools
1926.305 Jacks – lever and ratchet, screw and hydraulic
1926.306 Air receivers

1926.307 Mechanical power-transmission apparatus

Subpart J – Welding and Cutting
1926.350 Gas welding and cutting
1926.351 Arc welding and cutting
1926.352 Fire prevention
1926.353 Ventilation and protection in welding, cutting, heating
Subpart K – Electrical

1926.400 Introduction

1926.402 Applicability

1926.403 General requirements 1926.404

Wiring design and protection

1926.405 Wiring methods, components, and equipment for general use

1926.406 Specific purpose equipment and installations

1926.407 Hazardous (classified) locations

1926.408 Special systems

1926.416 General requirements 1926.417

Lockout and tagging of circuits 1926.431 Updated: 1 May 2024 Maintenance of equipment 1926.432 Environmental deterioration of equipment 1926.441 Battery locations and battery charging 1926.449 Definitions applicable to this subpart Subpart L – Scaffolds 1926.450 Scope, application, and definitions applicable to this subpart 1926.451 General requirements 1926.452 Additional requirements applicable to specific types of scaffolds 1926.453 Aerial lifts 1926.454 Training requirements

Appendix A, B, C, D, & E to Subpart L

Subpart M – Fall Protection
1926.500 Scope, application, and definitions applicable to this subpart
1926.501 Duty to have fall protection
1926.502 Fall protection systems criteria and practices
1926.503 Training requirements
Appendix A, B, C, D, & E to Subpart M

Subpart N – Cranes, Derricks, Hoists, Elevators and Conveyors 1926.550 Cranes and derricks 1926.552 Material hoists, personnel hoists, and elevators 1926.554 Overhead hoists 1926.555 Conveyors

Florida Center for Community Design + Research 233/234 Subpart O – Motor Vehicles, Mechanized Equipment, and Marine Operations 1926.600 Equipment 1926.601 Motor vehicles 1926.602 Material handling equipment 1926.604 Site clearing 1926.606 Definitions applicable to this subpart

Subpart P – Excavations

1926.650 Scope, application, and definitions applicable to this subpart1926.651 Specific excavation requirements1926.652 Requirements for protective systems

Subpart Q – Concrete and Masonry Construction 1926.700 Scope, application, and definitions applicable to this subpart 1926.701 General requirements 1926.702 Requirements for equipment and tools 1926.703 Requirements for cast-in-place concrete 1926.704 Requirements for pre-cast concrete 1926.706 requirements of masonry construction

Subpart R – Steel Erection 1926.750 Flooring requirements 1926.751 Structural steel assembly 1926.752 Bolting, riveting, fitting-up and plumbing-up 1926.753 Safety nets Subpart T – Demolition 1926.850 Preparatory operations 1926.851 Stairs, passageways, and ladders 1926.852 Chutes 1926.853 Removal of materials through floor openings 1926.854 Removal of walls, masonry sections and chimneys 1926.855 Manual removal of floors 1926.856 Removal of walls, floors, and material with equipment 1926.857 Storage 1926.858 Removal of steel construction 1926.859 Mechanical demolition

Subpart V – Power Transmission and Distribution

1926.950 General requirements

1926.951 Tools and protective equipment

1926.952 Mechanical equipment

1926.953 Materials handling
1926.954 Grounding for protection of employees 1926.955 Overhead lines
1926.956 Underground lines
1926.957 Construction in energized substations
1926.959 Lineman's body belts, safety straps and lanyards
1926.960 Definitions applicable to this subpart

Florida Center for Community Design + Research 235 Subpart
X – Stairways and Ladders
1926.1050 Scope, application, and definitions applicable to this subpart
1926.1051 General requirements
1926.1052 Stairways
1926.1053 Ladders
1926.1060 Training requirements

Subpart Z – Toxic and Hazardous Substances 1926.1101 Asbestos 1926.1102 Coal tar pitch volatile

Plan Availability and Review

The student exit survey is conducted to gather feedback from students about the technology and facilities available in their program area. This survey is reviewed annually to make any necessary improvements. Suggestions about the safety of students and employees' well-being are always welcome. The Department of Risk Management can visit our campus at any time and provide suggestions or comments to help us maintain a safer campus. PTC-CLWTR staff members also review this plan and provide feedback. The college seeks advice from District Security Staff and District Maintenance and Operations to ensure that our campus remains safe and efficient.

Handbook Supplement: Cleaning Protocols

This handbook supplement provides guidance for classroom and restroom cleaning. The procedures outlined in this handbook are designed to aid the Plant Operator in effectively utilizing the available tools and materials while maintaining satisfactory cleanliness. It should be noted that every room is unique and may require different cleaning techniques. Therefore, this handbook should be Updated: 1 May 2024 26

treated as a set of guidelines rather than strict instructions. It is recommended that common sense be used and the guidelines be adapted to suit the specific cleaning requirements of each room.

Safety is of utmost importance in any work setting. Plant Operators must prioritize safety measures to protect themselves and those around them.

Daily Classroom Cleaning

Task description: the daily task of cleaning a classroom involves several steps, including emptying waste containers and pencil sharpeners, dusting all horizontal surfaces within reach (without using a ladder), cleaning unused areas of whiteboards, cleaning whiteboard trays, spot cleaning furniture, dusting mopping or vacuuming the floor, removing gum and crayons from the floor, spot mopping tile floors, and securing the room for the night. Additionally, teachers should erase or mark a large 'X' through any writing on the whiteboard that requires cleaning.

Equipment, Tools, and Supplies: Safety Data Sheets (SDS) are easily accessible documents containing important information on handling or working with specific substances. This information includes details on flash point, toxicity, health effects, first aid, reactivity, storage, and disposal. SDSs are particularly useful in the event of a spill or any other accident. It is recommended to refer to the SDSs whenever there's any concern regarding the use of chemicals. Tools and supplies include:

- Treated Dust Mop or Upright/Backpack Vacuum
- All Purpose Cleaner
- Corn Broom
- Stainless Steel Cleaner
- Dustpan
- Window Cleaner
- Microfiber Duster
- Microfiber Towels- Red for Restrooms/clinics, Blue for all purpose
- Wet Mop
- Water
- Mop Bucket
- Mop Wringer

- Pail
- Counter Brush
- Plunger
- Putty Knife
- Rubber Gloves
- Custodial Cart/Trash Receptacle

Job Method: Before you start cleaning, ensure you have all the necessary items to avoid switching between your custodial closet and your work area. Proceed to your assigned work area and complete each room before moving on to the next one.

When you enter a room, start by picking up any large pieces of paper and other objects from the floor. As you walk around, straighten out the desks to make dust mopping or vacuuming easier later. Make a note of any maintenance needs such as burned-out lights, broken desks, or other issues, and report them to your Night Foreman immediately.

Empty the pencil sharpeners into your trash receptacle and check if they need repair. Also, empty the wastepaper baskets into your trash receptacle.

If the teacher wants the whiteboard cleaned, they will erase the board or mark through unwanted writing with a large "X". Clean with clean water, whiteboard cleaner, or approved chemical only. Clean all whiteboard trays with a microfiber towel or reinforced wipe. As you proceed along the whiteboard tray, lift up any erasers, markers, or other objects and replace them after cleaning.

With the microfiber duster or towel, dust all horizontal surfaces within reach without a ladder, including all bookcases, windowsills, file cabinets, counter tops, and other furniture. Dust all visible surfaces, but you are not expected to move books or other objects.

Start cleaning the floor by using the corn broom to sweep out all corners and under furniture that you cannot easily get to with the dust mop. With a treated dust mop, starting at the back of the room, dust mop the entire floor. Mop under most student desks by lifting one side and mopping under the desk. Be sure to unload your mop frequently by lifting it off the floor and shaking it out. Work your way to the classroom door and pick up the dirt with the corn broom and dustpan. Dislodge any gum or crayons with the putty knife. If the room is carpeted, vacuum all easily accessible floor areas. You are not expected to move heavy furniture. If you must move furniture, be certain to return it to its proper location when you are finished. Immediately notify your Night Updated: 1 May 2024 28

Foreman of any fresh stains.

Keep an eye out for new graffiti and remove any spills or other stains on furniture as soon as possible. Try to do some spot mopping each night in each room. After cleaning, take one last look around the room to ensure everything looks good. Lock up the room by closing and locking windows and turning off the lights. If the room is an exterior room, lock the door, and proceed to your next room. HVAC should be set higher or turned off per the common practice at each site or in each classroom.

Project Classroom Cleaning

Task Description: There are duties that need to be done every day, such as cleaning the classroom. There are also many duties that are traditionally done only during summer cleaning. However, there are several duties that need to be done more often than annually but not as often as daily. Time should be set aside every night for project cleaning tasks. Following are some of the project cleaning tasks that need to be done regularly.

High dusting – High dusting is defined as dusting any surface that can only be reached with a ladder. Using a ladder and a microfiber duster or towel, dust all surfaces that are not dusted daily. Some examples are light fixtures, A/C supply and return air ducts, tops of intercom speaker boxes and projection screens. High dusting should be a frequent project cleaning task.

Wet mopping tile floors – Resilient tile floors require periodic wet mopping to remove fine sand and grit. Daily dry mopping is the most important step in floor maintenance, but it is not enough. For mopping floors use all-purpose neutral cleaner. In areas where there is a lot of sand this should be a frequent project cleaning.

Washing furniture—You should spot-wash some furniture daily. On some project cleaning days, set aside enough time to wash the furniture. Use an all-purpose neutral cleaner or germicidal. Be sure to let your teacher know of your intentions to wash the furniture so they can have it cleaned.

Washing walls—To prevent buildup, occasionally clean Areas around doorknobs, light switches, pencil sharpeners, and other often-used items. Take extra caution when using water around electrical appliances.

Wash windows—On project cleaning days, try to wash the windows in at least one room. Use a window cleaner for this task. Updated: 1 May 2024 29 Burnishing—In areas where high-speed finish is used, the floors need to be burnished regularly to harden the finish. Use a high-speed buffing machine and pad for this task.

Summer Classroom Cleaning

Task Description: The task of summer classroom cleaning consists of cleaning all ceiling surfaces, cleaning light fixtures, washing all wall surfaces, cleaning windows, and cleaning all furniture. In rooms with tile floors summer classroom cleaning also consists of stripping and refinishing floor surfaces. In rooms with carpeted floors, the rooms must be prepared for shampooing.

Equipment, Tools, and Supplies: Safety Data Sheets (SDS) are readily available for review and provide the proper procedure for handling or working with particular substances. Information includes flash point, toxicity, health effects, first aid, reactivity, storage, and disposal. They are particularly useful if a spill or other accident occurs. Refer to the SDS anytime there is a concern about the use of chemicals. Tools and supplies include:

- Treated Dust Mop, or Upright/Backpack Vacuum
- All Purpose Cleaner
- Corn Broom
- Stainless Steel Cleaner
- Dustpan
- Window Cleaner
- Microfiber duster or towel
- Microfiber Towels or Reinforced Wipes
- Wet Mop
- Water
- Mop Bucket
- Mop Wringer
- Pail
- Microfiber Towels Red and Blue
- Putty Knife
- Rubber Gloves

- Custodial Cart/Trash Receptacle
- Plastic Sprayer
- Ladder
- Garden Hose
- Floor Scrubber
- Light Bulbs
- Hand Tools for Minor Repairs: screw drivers, hammer, adjustable wrenches (Allen wrench set), pliers

Job Method: Assemble tools and supplies—Move all necessary tools and supplies to the classroom, which will be cleaned in the summer. When entering the classroom, make a diagram of how the room is set up. This will make it easier to put the furniture back in the room.

Clean ceiling—Brush down all ceiling areas with the ladder and corn broom to remove dust and cobwebs. Note: Be sure to consult the Asbestos Awareness Plan to ensure the ceiling material is not asbestos-bearing. If there are washable surfaces, use an all-purpose neutral cleaner to wash them thoroughly. Remove, clean, and replace Air Conditioning supply return diffusers.

Clean light fixtures: Remove or unfasten light diffusers. Remove all light bulbs from the fixtures. Dusted and wiped clean with a microfiber towel, replace bulbs with severely darkened ends. Dusted the tops of fixtures. Wash light fixtures and diffusers using the all-purpose neutral cleaner. Note: Take extra caution when using water around electrical appliances. Replace bulbs and diffusers.

Wash wall surfaces – At the top, wash all walls using an all-purpose neutral cleaner or germicidal.

Clean whiteboards - Clean them with clean water, whiteboard cleaner, or approved chemical only.

Wash windows – Wash all windows using window cleaner, both inside and outside. Note: Some schools prefer to perform this task just before school reopens.

Clean furniture—All furniture should be washed thoroughly using an all-purpose neutral cleaner or germicidal. Be sure to remove any gum or other substances from under furniture Updated: 1 May 2024

31

with the putty knife. Report any necessary repairs to the Head Plant Operator.

Floor care – Tile floors must be refinished as needed by either a deep scrub and recoat or complete removal of finish and refinished. Carpets should be vacuumed and cleaned with an assigned carpet extractor.

Set up room – Using the diagram you prepared earlier, replace all furniture with its original arrangement

Restroom Cleaning

Task Description: The daily restroom cleaning task consists of emptying waste containers, dislodging material attached to the ceiling, dusting all horizontal surfaces, cleaning and sanitizing toilet fixtures, and cleaning and sanitizing floor surfaces.

Equipment, Tools, and Supplies: Safety Data Sheets (SDS) are readily available for review and provide the proper procedure for handling or working with particular substances. Information includes flash point, toxicity, health effects, first aid, reactivity, storage, and disposal. They are particularly useful if a spill or other accident occurs. Refer to the SDS anytime there is a concern about the use of chemicals. Tools and supplies include:

- Corn Broom
- Dustpan
- Wet Mop
- Mop Bucket
- Germicidal
- Mop Wringer
- Window Cleaner
- Bowl Swab
- Hand Soap
- Bowl Brush
- Water
- Paper Towels
- Custodial Cart/Trash Receptacle
- Toilet Tissue
- Microfiber Towels-Red for Restrooms

- Scrubbing Pads
- Plunger
- Putty Knife
- Rubber Gloves
- Kaivac Restroom Cleaner

Job Method: Proper preparation: Ensure you have all items with you before you proceed to minimize having to move between your custodial closet and your area.

Proceed to your assigned work area – After completing each room, move directly to the next room in your designated work area.

Initial walkaround: Walk around the restroom and pick up any large pieces of paper on the floor. Note any burned-out lights or other maintenance problems and report them to your Night Foreman as soon as possible.

Wastepaper baskets – Empty wastepaper baskets into your trash receptacle and remove the wastepaper baskets from the room.

Ceiling – With a corn broom, dislodge any material attached to the ceiling. Note: consult the Asbestos Awareness Plan to ensure the ceiling material is not asbestos-bearing.

Sweep floor—Starting at the room's rear, sweep up any dirt and heave material off the floor with a corn broom. Don't worry about fine dirt; the floor will be wet mopped later. If you encounter any gum or other substances stuck to the floor, dislodge them with the putty knife.

Walls—The first step in wall washing is to apply a liberal amount of germicidal cleaner to the wall surface. This can be done with either a microfiber towel, pump-up sprayer, or Kaivac. The next step is to go over the wall surfaces with a microfiber towel or rinse with the Kaivac. The physical action of the microfiber towel or Kaivac is needed to dislodge dirt. Allow the wall to air dry.

Unstop fixtures—Attempt to unstop any plugged fixtures using the plunger. If you are unsuccessful, pour in a liberal amount of germicidal solution and notify your Night Foreman.

Sanitize fixtures—Sanitize the interiors of all fixtures with a germicidal cleaner. Use the bowl swab or Kaivac for this task. For stubborn stains, use the bowl brush. It may be necessary to use bowl cleaner periodically. Use this only with your Night Foreman's permission. Updated: 1 May 2024 Exterior of fixtures—Sanitize the exterior of all fixtures with a mixture of a germicidal cleaner. Use a bowl brush for this task. Be sure to get under sinks and all plumbing. Rinse all surfaces again. You may use a pump-up sprayer or Kaivac for this task.

Seats and plumbing—Air Dry all toilet seats, porcelain surfaces, and plumbing. Make sure you use a neutral germicidal.

Mirrors—If there are any, clean them using a window cleaner. If they are cleaned with the Kaivac, use a window squeegee.

Re-flush fixtures—Re-flush all fixtures, and if there is an odor problem, pour a small amount of germicidal solution into each fixture. Pour water or germicidal solution down floor drains.

Replace supplies – Replace all supplies such as toilet tissue, paper towels, and soap.

Floors – In the mop bucket, prepare a solution of germicidal suitable for the floor type. Start mopping the floor from the back and work towards the entrance of the restroom. Alternatively, you can clean the floor with the Kaivac and use a vacuum to remove any remaining dirt.

Summer Restroom Cleaning

Task Description: The task of summer restroom cleaning consists of cleaning all ceiling surfaces, light fixtures, walls, windows, fixtures, and reconditioning floor surfaces.

Equipment, Tools, and Supplies: Safety Data Sheets (SDS) are readily available for review and provide the proper procedure for handling or working with particular substances. Information includes flash point, toxicity, health effects, first aid, reactivity, storage, and disposal. They are particularly useful if a spill or other accident occurs. Refer to the SDS anytime there is a concern about the use of chemicals. Tools and supplies include:

- Corn Broom
- Dust Mop
- All Purpose Cleaner
- Germicidal
- Plastic Sprayers
- Step Ladder
- Pail
- Garden Hose
- Bowl Brush

- Custodial Cart
- Microfiber Towels Red
- Scrubbing Pad
- Corner Brush
- Window Cleaner
- Microfiber Duster
- Water
- Wet Mop
- Mop Bucket
- Mop Wringer
- Bowl Swab
- Plunger
- Putty Knife
- Rubber Gloves
- Kaivac Restroom Cleaner

Job Method: Assemble tools and supplies – Move all tools and supplies to the restroom to be cleaned.

Clean ceiling—With the ladder and corn broom, brush down all ceiling areas to remove cobwebs. Note: Be sure to consult the Asbestos Awareness Plan to ensure the ceiling material is not asbestos-bearing. If there are washable surfaces, use an all-purpose cleaner and water to wash them thoroughly.

Clean light fixtures: Remove or unfasten light diffusers. Remove all light bulbs from the fixtures. Dusted and wiped clean with a microfiber towel, replace bulbs with severely darkened ends. Dusted the tops of fixtures. Wash light fixtures and diffusers using the all-purpose neutral cleaner. Note: Take extra caution when using water around electrical appliances. Replace bulbs and diffusers.

Wash wall surfaces – Wash all wall surfaces as described in the section on daily restroom cleaning.

Wash windows - Wash all windows, inside and outside, using a cleaner.

Clean fixtures – Clean and sanitize all fixtures as described in the daily restroom cleaning section.

Floor care: The floor may need to be scrubbed to remove any buildup. Buildup should be limited if maintained properly during the school year. Avoid any harsh chemicals that may damage the floor.

Final cleaning – Just before occupancy, the restroom should be cleaned and sanitized again, following the steps listed in the section on daily restroom cleaning.

Kaivac cleaning –Recommend using the Kaivac to thoroughly clean walls, windows, fixtures, and floors.