

# Healthy Green Schools & Colleges



HEALTHY SCHOOLS  
CAMPAIGN

## Healthy Green Schools & Colleges™ Standard for K-12 School Districts and Higher Education Institutions

DRAFT FOR 2<sup>ND</sup> PUBLIC COMMENT  
September 20, 2021

Healthy Green Schools & Colleges is a partnership between Green Seal®  
and Healthy Schools Campaign.

# Healthy Green Schools & Colleges Standard

---

---

## Overview: Healthy Green Schools & Colleges

---

---

7

A Standard by and for Facility Professionals.

7

The Tools to Transform School Environments.

7

Seeking Feedback.

8

---

---

## Section 1: Getting Started

---

---

9

Policy Adoption.

9

Plan Development.

9

Responsible Party.

9

Equity Monitoring.

10

Performance Monitoring.

10

---

---

## Section 2: Training

---

---

12

Training for Cleaning Personnel

12

Initial Onboarding Training.

12

Safety Training.

12

Site-Specific Training.

13

Annual Training.

13

Training for Other Personnel

13

Cross-Departmental Training. (1 point)

13

Procurement Training. (1 point)

13

Training Records.

13

Skills Testing.

14

Training Curriculum Maintenance.

14

---

---

## Section 3: Communication

---

---

15

Management.

15

Building Occupants (Faculty, Staff, and Students).

15

Vulnerable Populations.

16

Student Families and Community.

16

Section 4: Procurement	17
Consumable Goods	17
General Cleaning Products.	18
Sanitizing and Disinfecting Products.	18
Hand Sanitizing Products.	19
Specialty Cleaning Products.	19
Paper Products.	19
Disposable Menstrual Products.	19
Trash and Recycling Can Liners.	20
Ice Melt and Snow and Ice Removal.	20
Durable Goods	20
Receptacles and Dispensers.	20
Water Softeners for Drinking Fountains.	20
On-Site Electricity Generators.	21
Hand Dryers and Paper Towel Dispensers.	21
Paints and Coatings.	21
Tools and Supplies.	21
Floor Cleaning Accessories.	21
Filters.	21
Stand Alone Air Filtration Units.	21
Powered Equipment	22
Vacuum Cleaners.	22
Carpet Extraction Equipment.	22
Powered Floor Maintenance Equipment.	22
Propane Powered Floor Maintenance Equipment	23
Outdoor Groundskeeping Equipment	23
Section 5: Facilities Operations and Maintenance	24
Facility Cleaning	24
Where Federal, State, Local, or Tribal regulations also apply, comply with the most stringent requirement.	24
Cleaning by Hand.	24
Sanitizing Tasks.	25

<u>Disinfecting Tasks.</u>	<u>25</u>
<u>Cleaning with Powered Equipment.</u>	<u>26</u>
<u>Location Specific Cleaning Requirements</u>	<u>26</u>
<u>Food Service, Dining Areas, and Break Rooms.</u>	<u>26</u>
<u>Restrooms.</u>	<u>26</u>
<u>Laundry.</u>	<u>27</u>
<u>Entryways.</u>	<u>27</u>
<u>Laboratories.</u>	<u>27</u>
<u>Outside Cleaning.</u>	<u>28</u>
<u>Floor Maintenance</u>	<u>28</u>
<u>Routine Floor Maintenance.</u>	<u>28</u>
<u>Periodic or Restorative Maintenance.</u>	<u>28</u>
<u>Carpet Cleaning and Maintenance</u>	<u>29</u>
<u>Routine Maintenance.</u>	<u>29</u>
<u>Interim or Restorative Cleaning.</u>	<u>29</u>
<u>Waste Handling and Recycling</u>	<u>30</u>
<u>Waste and Recycling Storage.</u>	<u>30</u>
<u>Waste and Recycling Collection.</u>	<u>30</u>
<u>Back of House Procedures – Material Handling and Storage</u>	<u>31</u>
<u>Powered Equipment Maintenance</u>	<u>33</u>
<u>General Powered Equipment Maintenance.</u>	<u>33</u>
<u>Vacuum Cleaner Maintenance.</u>	<u>34</u>
<hr/>	
<u>Section 6: Building Systems Maintenance and Repairs</u>	<u>35</u>
<u>Heating, Ventilation, and Air Conditioning (HVAC) Systems.</u>	<u>35</u>
<u>Water.</u>	<u>36</u>
<u>Pest Management.</u>	<u>37</u>
<u>Ensure workers adhere to relevant personnel licensing requirements.</u>	<u>38</u>
<u>Sidewalk, Pavement, and Grounds Maintenance.</u>	<u>38</u>
<u>Site Management Plan</u>	<u>38</u>
<u>Hardscape and Pavement Maintenance</u>	<u>38</u>
<hr/>	
<b><u>Section 7: Monitoring and Evaluation</u></b>	

	40
<b>Indoor Air Quality Monitoring</b>	40
Carbon Dioxide Monitoring	40
Ongoing Monitoring for Contaminants	40
Action Planning to Address IAQ Issues	41
Reporting on IAQ Issues	41
Performance Measurement, Metrics and Data Tracking	41
Staffing Formulas	42
	43
Glossary	43
Healthy Green Schools & Colleges Standard	<b>Error! Bookmark not defined.</b>
<b>Overview: Healthy Green Schools &amp; Colleges</b>	4
A Standard by and for Facility Professionals.	4
The Tools to Transform School Environments.	4
Seeking Feedback.	5
<b>Section 1: Getting Started</b>	6
Policy Adoption.	6
Plan Development.	6
Responsible Party.	6
<b>Section 2: Training</b>	7
Training for Cleaning Personnel	7
Initial Onboarding Training.	7
Safety Training.	7
Site-Specific Training.	8
Annual Training.	8
Training for Other Personnel	8
Cross-Departmental Training.	8
Procurement Training.	8
Training Records.	8
Skills Testing.	8
Training Curriculum Maintenance.	9
<b>Section 3: Communication</b>	10
Management.	10
Building Occupants (Faculty, Staff, and Students).	10
Vulnerable Populations.	10

Student Families and Community.	11
<b>Section 4: Procurement</b>	<b>12</b>
Consumable Goods	12
General Cleaning Products.	12
Disinfecting Products.	12
Sanitizing Products.	13
Hand Sanitizing Products.	13
Specialty Cleaning Products.	13
Paper Products.	13
Disposable Menstrual Products.	13
Trash and Recycling Can Liners.	14
Ice Melt and Snow and Ice Removal.	14
Durable Goods	14
Receptacles and Dispensers.	14
Water Softeners for Drinking Fountains.	14
On-Site Electricity Generators.	14
Hand Dryers and Paper Towel Dispensers.	14
Paints and Coatings.	14
Tools and Supplies.	14
Floor Cleaning Accessories.	15
Filters.	15
Stand Alone Air Filtration Units.	15
Powered Equipment	15
Vacuum Cleaners.	15
Carpet Extraction Equipment.	15
Powered Floor Maintenance Equipment.	16
Propane Powered Floor Maintenance Equipment	16
Outdoor Groundskeeping Equipment	16
<b>Section 5: Facilities Operations and Maintenance</b>	<b>17</b>
Facility Cleaning	17
Cleaning by Hand.	17
Sanitizing Tasks.	17
Disinfecting Tasks.	17
Cleaning with Powered Equipment.	18
Location Specific Cleaning Requirements	18
Food Service, Dining Areas, and Break Rooms.	18
Restrooms.	18
Laundry.	19
Entryways.	19
Laboratories.	19

Outside Cleaning.	19
Floor Maintenance	19
Routine Floor Maintenance.	20
Periodic or Restorative Maintenance.	20
Carpet Cleaning and Maintenance	20
Routine Maintenance.	20
Interim/Restorative Cleaning.	21
Waste Handling and Recycling	21
Waste and Recycling Storage.	21
Waste and Recycling Collection.	21
Back-of House Procedures	22
Material Handling and Storage	22
Powered Equipment Maintenance	23
General Powered Equipment Maintenance.	23
Vacuum Cleaner Maintenance.	24
<b>Section 6: Building Systems Maintenance and Repairs</b>	<b>25</b>
Heating, Ventilation, and Air Conditioning (HVAC) Systems.	25
Water.	26
Pest Management.	26
Sidewalk, Pavement, and Grounds Maintenance.	27
Site Management Plan	27
Hardscape and Pavement Maintenance	27
<b>Section 7: Monitoring and Evaluation</b>	<b>28</b>
Indoor Air Quality Testing/Monitoring and Energy Management	28
Performance Measurement/Metrics and Data Tracking	28
Staffing Formulas	29
<b>Glossary</b>	<b>30</b>

---

# Overview: Healthy Green Schools & Colleges

---

The [COVID-19](#) pandemic has made creating healthy school environments an urgent national priority and brought to light the serious under-investment in school facilities nationwide. However, even before the pandemic, nearly half of U.S. schools reported indoor air quality problems that put the health of students and staff at risk.

Unhealthy indoor air, inadequate ventilation, and chemical exposure from cleaning and maintenance routines continue to present systemic challenges in school districts. On top of health concerns, these issues are linked to poor concentration and test performance in students, adding preventable barriers to achievement.

## A Standard by and for Facility Professionals.

School facility management professionals are vital stewards of school environments, making daily decisions that affect the health, safety and sustainability of places where students spend more than 1,000 hours a year. While they are experts at managing costs, these professionals often lack proper funding and resources for the essential work they do caring for students and staff.

Healthy Schools Campaign (HSC) and Green Seal have drafted the first national standard for healthy and sustainable school facilities [at the district level](#), prioritizing measures that make a significant difference in indoor air quality without major capital investments.

The draft, science-based standard was designed in partnership with the award-winning school facility directors on the Healthy Green Schools & Colleges Steering Committee. It is geared toward K-12 school districts and higher education institutions and designed to be accessible for [schools-school districts](#) across the spectrum, whether they are just getting started exploring environmental health and sustainability improvements or are already a leader.

## The Tools to Transform School Environments.

The Healthy Green Schools & Colleges standard will be the centerpiece of a comprehensive program designed to support school facility management professionals.

A self-assessment tool will [allow-enable](#) school [districts](#) to [guide schools through](#) objectively measuring [e](#)-their current indoor environmental health and sustainability performance, while guidebooks, training resources and other tools will help them determine and take their next steps. Then, a points-based scoring system will encourage schools to keep improving at their



own pace, with support from a network of facility management peers across the country who are on a similar journey.

School [districts](#) that reach the top level of achievement will be able to apply for third-party certification, earning public recognition for their verified expertise in providing healthy school environments.

## Seeking Feedback.

We develop standards through an open and transparent process that includes extensive stakeholder outreach and opportunities for public input. ~~The~~ [A second](#) public comment period is now open. Please submit comments to [standard@healthygreenschools.org](mailto:standard@healthygreenschools.org) by October ~~1922~~, 2021.

---

## Section 1: Getting Started

---

### REQUIRED FOR ALL PROJECTS

INTENT: To assist school districts in developing and implementing procedures and systems to improve their preparedness efforts, and to ensure the implementation of facility management practices that are healthy, safe, ~~and~~ sustainable, and equitable.

REQUIREMENTS:

The school district facility management department shall have a policy, plan, responsible party, and policy equity and performance monitoring in place to support healthy, safe, sustainable, and equitable facility management practices across the district.

### Policy Adoption.

### REQUIRED FOR ALL PROJECTS

Develop and obtain School Board approval of a district level policy for clean and healthy, safe, sustainable, and equitable school facility management practices. If a policy has not yet been approved by the School Board, document the process undertaken to date to develop the policy and obtain approval, including an anticipated timeline for achievement.

### Plan Development.

### REQUIRED FOR ALL PROJECTS

Create a documented district level facility operations and maintenance plan with the input of relevant school stakeholders. The plan must include Standard Operating Procedures related to healthy, safe, sustainable, and equitable clean and healthy operations and maintenance across the district, schedules for routine and periodic cleaning operations, and details specific to each school site, and requirements for monitoring the impacts of program implementation.

### Responsible Party.

### REQUIRED FOR ALL PROJECTS

Convene relevant stakeholders to review the district level plan annually, at minimum. Include representatives from the following stakeholder groups, at minimum:

- Custodial
- Maintenance
- Grounds
- Food service
- Handler for contracted services
- Site level administrator

- Employee and/or teacher union representatives.

Other relevant stakeholders encouraged but not required to participate include:

- Transportation
- School nurses
- School counselors
- Parent Teacher Association/school community council
- Student/family representatives.

Create a written charge for the responsible party that includes scope of responsibilities and frequency of meetings.

## Equity Monitoring.

**5 POINTS AVAILABLE**

At least one representative from the responsible party shall be charged with monitoring the equitable implementation of the policy and plan across the district. This includes, but is not limited to, ensuring the following activities:

- accurate quantification of vulnerable populations across the district
- the distribution of resources such as environmentally preferable products is proportionate to the presence of vulnerable populations
- ensuring all schools are given adequate budgets and training to procure and implement the requirements in this standard
- communications relevant to compliance with this standard are disseminated consistently across all schools
- channels for communication with management are made available to all schools in the district, and are reviewed and addressed consistently across all schools in the district
- the district publicly communicates regarding equity issues in facility maintenance and operations activities throughout the district, and actions taken to rectify them

## Performance Monitoring.

**REQUIRED FOR ALL PROJECTS**

At least one representative from the responsible party shall be charged with the following monitoring activities across the district:

- ensuring compliance with the requirements of this standard, and that appropriate documentation is maintained
- receiving and addressing questions, special cases, or unique considerations within individual schools that impact compliance with standard requirements
- providing ongoing reporting of performance achievements, lessons learned, and issues to the Healthy Schools Campaign

|

---

## Section 2: Training

---

***INTENT:** To ensure that cleaning and maintenance personnel work in the safest and most effective manner possible and receive appropriate training to promote health, safety, ~~and~~ sustainability, [sanitation](#), and [minimize the spread of infectious disease](#) through their work.*

**REQUIREMENTS:**

Through in-house or outsourced providers, deliver the following training on an ongoing basis.

Ensure the training needs of each staff member is met. Document training delivery accommodation requests (e.g., materials provided in a non-English language, transcripts from presentations or recordings where closed captions are not available) and accommodations provided.

### Training for Cleaning Personnel

**REQUIRED FOR ALL PROJECTS**

#### Initial Onboarding Training.

Upon hiring and completed within 1 year, provide all [district](#) cleaning personnel with 12+ hours of training that covers at least the following topics:

- safe and effective handling and use of all cleaning products
- cleaning, [sanitization](#), and [disinfection](#) procedures [to promote health and safety and minimize the spread of infectious disease](#)
- use and maintenance of cleaning equipment
- 
- safety training (see curriculum below)
- site specific training (see curriculum below)
- all procedures needed to conform to this standard
- communication with building occupants on why tasks are being completed
- an overview of this standard and how their work impacts health, safety, ~~and~~ sustainability, [and equity within their school and across the district](#)

#### Safety Training.

Upon hiring and completed within 1 year as part of Initial Onboarding Training, provide Safety Training to all [district](#) cleaning personnel that covers at least the following topics:

- reducing and preventing ergonomic injuries
- exposure to hazardous materials, including in site-specific locations such as chemistry laboratories

- proper storage and disposal of hazardous materials
- proper use and safe disposal of personal protective equipment
- proper rinsing and disposal of leftover cleaning products or their empty containers
- safe use of powered equipment to prevent injury

#### Site-Specific Training.

Upon hiring and completed within 1 year as part of Initial Onboarding Training, provide Site Specific Training to all [district](#) cleaning personnel that covers at least the following topics:

- cleaning procedures for their assigned facilities
- facility-specific cleaning plan
- measures for protection of *vulnerable populations*
- communications escalation in the event of hazardous events

#### Annual Training.

Provide all [district](#) cleaning personnel who have been on staff at least 1 year 24+ hours of annual training delivered through in-service, continuing education, or professional development, to maintain knowledge of correct procedures for safety, cleaning products, equipment, techniques, and relevant environmental standards.

### Training for Other Personnel

**UP TO 2 POINTS AVAILABLE**

#### Cross-Departmental Training. [\(1 point\)](#)

Provide teachers, nurses, food service staff, maintenance and ground staff, [transportation personnel](#), and other [relevant](#) school personnel training on their roles and responsibilities to ensure their actions support ~~the plan~~, [promote health and safety, minimize the spread of infectious disease, and do not contradict the plan](#).

#### Procurement Training. [\(1 point\)](#)

Provide procurement staff annual training on selecting environmentally preferable cleaning products, materials, equipment, ~~and~~ various certifications, [and cleaning personnel assessment on their experience using these products](#).

### Training Records.

**REQUIRED FOR ALL PROJECTS**

Maintain records for each [employee-personnel](#) of all training required by this standard.

Records shall include:

- the topics included in the training
- a general outline of information covered

- the name and qualifications of the trainer
- the date(s) and duration of the training or courses

Retain records for all ~~employees~~ personnel for all training throughout the duration of employment, and for one year after ~~employee~~ departure.

## Skills Testing.

**1 POINT AVAILABLE**

Use a simple pass/fail test or hands-on check with equipment to ensure ~~cleaning personnel~~ the employee understands and can successfully implement skills taught during training. Maintain a record of skills testing alongside training records.

## Training Curriculum Maintenance.

**REQUIRED FOR ALL PROJECTS**

Conduct an evaluation of materials at least every 2 years to check for relevance and appropriateness. Update materials as needed.

---

## Section 3: Communication

---

*INTENT: To encourage clear and effective communication among cleaning staff, management, and school building administrators, staff, and students that will help all parties to develop trust and continually improve the School Specific Healthy and Sustainable Cleaning Plans.*

REQUIREMENTS:

Each school [within the district](#) shall create a written plan for regular communications to school stakeholders. At minimum, communicate with the audiences on the topics described below.

[Where Federal, State, Local, or Tribal regulations also apply, comply with the most stringent requirement.](#)

### Management.

**REQUIRED FOR ALL PROJECTS**

Establish a channel for facilities and maintenance staff to provide comments and suggestions regarding the following topics, at minimum:

- efficacy of cleaning products, maintenance equipment, and policies and procedures
- coordination with pest control
- construction and building improvements
- the presence of pests
- maintenance issues
- interferences with cleaning or recycling operations

Ensure that the communication channel is ongoing. Information may be collected in a variety of ways most appropriate to the type of information communicated (e.g., feedback on future building improvements vs. the presence of pests in a building).

### Building Occupants (Faculty, Staff, and Students).

**REQUIRED FOR ALL PROJECTS**

Make available to all building occupants the School Specific Healthy and Sustainable Cleaning Plan on the School District's website and in hard copy in each building.



## Vulnerable Populations.

**REQUIRED FOR ALL PROJECTS**

Document the occurrence of situations where cleaning operations have the potential to adversely affect any identified members of a *vulnerable population* ~~in a building within each school building~~. Provide communications as needed. Ideally, communicate in advance, and within 24 hours, of a required cleaning operation that has the potential to adversely affect a member of a *vulnerable population*.

## Student Families and Community.

**REQUIRED FOR ALL PROJECTS**

Communicate publicly that the school district is seeking Certification and once it has achieved Certification under this Standard via signage at building entrances and within the buildings, and online through social media and the school district's website.

## Section 4: Procurement

**UP TO 12 POINTS AVAILABLE**

**INTENT:** To ensure that ~~the consumable and durable goods, tools, supplies, and equipment purchased by the school~~ school district purchases reduce negative environmental and human health impacts and help reduce the spread of infectious disease, while also delivering effective functional performance.

**REQUIREMENTS:**

For the following categories, purchase *environmentally preferable products* as defined below. Products must be purchased during the performance period to earn points.

Where Federal, State, Local, or Tribal regulations also apply, comply with the most stringent requirement.

### Consumable Goods

At the district level, achieve environmentally preferable purchases of consumable goods (by cost) at the following percentages during the performance period.

<u>Percent of Consumable Goods Purchases (by Cost)</u>	<u>Points</u>
<u>25 percent</u>	<u>Required for all projects</u>
<u>50 percent</u>	<u>2 points</u>
<u>70 percent</u>	<u>3 points</u>
<u>85+ percent</u>	<u>4 points</u>

Consumable goods include the following product categories:

- General Cleaning Products
- Sanitizing and Disinfecting Products
- Hand Sanitizing Products
- Specialty Cleaning Products
- Paper Products
- Disposable Menstrual Products
- Trash and Recycling Can Liners
- Ice Melt and Snow and Ice Removal

## General Cleaning Products.

Purchase products certified to Green Seal [GS-37 Edition 7.6 or later](#), or a ~~relevant program listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing<sup>4</sup>~~ [n equivalent](#) for the following general cleaning products:

- general purpose (all purpose) cleaners and degreasers
- bathroom cleaners and deodorizers (includes hard surface, toilet, and urinal)
- glass, mirror, and window cleaners
- carpet, rug, and upholstery cleaners (includes routine and spot cleaning products)
- floor cleaners, strippers, sealers, and finishes
- hand soaps and hand cleaners.

~~Avoid using products that contain fragrances or colored dyes whenever possible. Select products that are 1) free of colored dyes and 2) fragrance-free or that comply with the International Fragrance Association's (IFRA) safety standards.~~

## Sanitizing and Disinfecting Products.

Purchase [sanitizers and disinfectants](#), including antimicrobial mold and mildew cleaners, that ~~are on U.S. EPA's List N: Disinfectants for Coronavirus and~~ contain only the following active ingredients:

- hydrogen peroxide\*\*
- citric acid
- lactic acid
- ethyl alcohol (also called ethanol or just alcohol)
- isopropyl alcohol
- peroxyacetic acid\*\*
- sodium bisulfate
- [hypochlorous acid \(sold off the shelf of device-generated on-site\)](#)
- [aqueous ozone \(device-generated on-site\)](#)

\*\*The combination of hydrogen peroxide and peroxyacetic acid is a designated asthmagens, so avoid products that contain both.

~~Select products that are 1) free of colored dyes and 2) fragrance-free or that comply with the International Fragrance Association's (IFRA) safety standards.~~

~~Avoid using products that contain fragrances or colored dyes whenever possible.~~

## Sanitizing Products.

~~[Requirements for this section are in development. Please provide suggestions.]~~

---

<sup>4</sup> ~~<https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>~~

## Hand Sanitizing Products.

Purchase alcohol-based hand sanitizing products that are certified to Green Seal [GS-41 Edition 2.3 or later, GS-44 Edition 4.2 or later, or an equivalent.](#) ~~or a relevant program listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing.~~<sup>2</sup> [Select products that are 1\) free of colored dyes and 2\) fragrance-free or that comply with the International Fragrance Association's \(IFRA\) safety standards.](#)

~~Avoid using products with fragrances whenever possible.~~

## Specialty Cleaning Products.

Purchase products certified to Green Seal [GS-53 Edition 2.6 or later,](#) or an equivalent ~~listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing~~<sup>3</sup> for the following specialty cleaning products:

- metal polish (including but not limited to chrome and brass cleaner)
- furniture polish
- graffiti remover
- gum remover
- lime and scale remover
- mildew removers

[Select products that are 1\) free of colored dyes and 2\) fragrance-free or that comply with the International Fragrance Association's \(IFRA\) safety standards.](#)

~~Avoid using products that contain fragrances or colored dyes whenever possible.~~

## Paper Products.

Purchase toilet and facial tissue, ~~and~~ paper towels, and napkins certified to Green Seal [GS-1 Edition 6.4 or later,](#) or ~~a relevant program listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing.~~<sup>4</sup> [an equivalent.](#)

## Disposable Menstrual Products.

Purchase menstrual products that are biodegradable. [Select products that are 1\) free of colored dyes and 2\) fragrance-free or that comply with the International Fragrance Association's \(IFRA\) safety standards.](#)

---

<sup>2</sup> ~~<https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>~~

<sup>3</sup> ~~<https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>~~

<sup>4</sup> ~~<https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>~~

## Trash and Recycling Can Liners.

Purchase plastic liners containing a minimum of 10% post-consumer recycled content or a thickness of less than 0.7 mils.

## Ice Melt and Snow and Ice Removal.

Purchase ice melt products that do not contain chloride, including:

- sodium chloride
- magnesium chloride
- potassium chloride
- calcium chloride

## Durable Goods

At the district level, achieve environmentally preferable purchases of durable goods (by cost) at the following percentages during the performance period.

<u>Percent of Durable Goods Purchases (by Cost)</u>	<u>Points</u>
<u>25 percent</u>	<u>Required for all projects</u>
<u>50 percent</u>	<u>2 points</u>
<u>70 percent</u>	<u>3 points</u>
<u>85+ percent</u>	<u>4 points</u>

Durable goods include the following product categories:

- Receptacles and Dispensers
- Water Softeners for Drinking Fountains
- On-Site Electricity Generators
- Hand Dryers and Paper Towel Dispensers
- Paints and Coatings
- Tools and Supplies
- Floor Cleaning Accessories
- Filters
- Stand Alone Air Filtration Units

## Receptacles and Dispensers.

For new purchases of dispensing systems for receptacles and dispensers, including ~~hand soap dispensers~~, menstrual product receptacles, ~~and~~ paper product dispensers, ~~and hand sanitizer dispensers~~, purchase ADA compliant, touch-free systems.

## Water Softeners for Drinking Fountains.

Use metered water softeners.

## On-Site Electricity Generators.

For new generator purchases, purchase U.S. EPA Energy Star Certified or equivalent products.

## Hand Dryers and Paper Towel Dispensers.

For new hand dryers and paper towel dispensers, purchase and install low-energy, touch-free systems.

## Paints and Coatings.

Purchase products that are certified to Green Seal, GS-11 [Edition 4.0 or later](#), or a ~~relevant program listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing.~~<sup>5</sup> [equivalent](#).

## Tools and Supplies.

For new purchases of tools and supplies not covered in other sections:

- Use only formaldehyde-free ingredients.
- Use microfiber cleaning cloths.
- Use ergonomic tools.

## Floor Cleaning Accessories.

For new purchases of floor cleaning pads, brushes, and accessories, purchase products certified by Green Seal or a ~~relevant program listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing.~~<sup>6</sup> [equivalent](#).

## Filters.

For all powered equipment with filters, purchase the highest efficiency filters the equipment will support, as described in the equipment's filtration specifications. Use HEPA filters whenever possible, based on equipment specifications.

## Stand Alone Air Filtration Units.

For all new unit purchases, select multi-filtration air filtration units [using proven technologies](#), with the capacity to provide four air changes per hour, [properly sized](#) for the square footage in the space they are used. When possible, purchase the lowest decibel unit that satisfactorily meets the air change requirements.

---

<sup>5</sup> ~~<https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>~~

<sup>6</sup> ~~<https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>~~

## Powered Equipment

At the district level, achieve environmentally preferable purchases of powered equipment (by cost) at the following percentages during the performance period.

<u>Percent of Durable Goods Purchases (by Cost)</u>	<u>Points</u>
<u>25 percent</u>	<u>Required for all projects</u>
<u>50 percent</u>	<u>2 points</u>
<u>70 percent</u>	<u>3 points</u>
<u>85+ percent</u>	<u>4 points</u>

Powered equipment includes the following product categories:

- Vacuum Cleaners
- Carpet Extraction Equipment
- Powered Floor Maintenance Equipment
- Propane Powered Floor Maintenance Equipment
- Outdoor Groundskeeping Equipment

### Vacuum Cleaners.

For new equipment purchases, purchase-select equipment that meets the requirements of the Carpet and Rug Institute Seal of Approval/Green Label vacuum program or an equivalent listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing<sup>7</sup>, and operates at a sound level below 70 decibels (dBA).

Whenever possible, purchase lightweight, self-propelledself-propelled, ergonomic equipment.

### Carpet Extraction Equipment.

For new equipment purchases, select products that meet the requirements of the Carpet and Rug Institute Bronze Seal of Approval or an equivalent listed in the U.S. EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing.<sup>9</sup>

Whenever possible, purchase lightweight, self-propelledself-propelled, ergonomic, and low-water use (when appropriate) equipment.

### Powered Floor Maintenance Equipment.

For new equipment purchases, purchase-select products that effectively capture particles and operate at a sound level below 70 dBA.

<sup>7</sup> <https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>

<sup>8</sup> <https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>

<sup>9</sup> <https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>

Whenever possible, purchase lightweight, ~~self-propelled~~self-propelled, ergonomic, and low-water use (when appropriate) equipment.

### Propane Powered Floor Maintenance Equipment

~~For all n~~New equipment purchases, ~~must select products have with~~ low-emission engines certified by the California Air Resources Board under the Small Off-Road Engines or Equipment program or ~~equivalent, and~~equivalent and be equipped with catalytic and exhaust monitoring.

Whenever possible, purchase lightweight, ~~self-propelled~~self-propelled, ergonomic, and low-water use (when appropriate) equipment.

### Outdoor Groundskeeping Equipment

Whenever possible, purchase lightweight, ~~self-propelled~~self-propelled, ergonomic, and low-water use (when appropriate) equipment.



---

## Section 5: Facilities Operations and Maintenance

---

### Facility Cleaning

**REQUIRED FOR ALL PROJECTS**

*INTENT: To reduce exposure and injury risks to cleaning staff and reduce the risk of virus transmission, reduce exposure to environmental health hazards, and to support student health needs~~reduce the environmental impacts of facility operations and maintenance.~~*

REQUIREMENTS:

Within each school site, meet the relevant requirements below.

For all job tasks, provide cleaning staff with instructions on procedures in languages spoken by the personnel implementing the procedures.

Where Federal, State, Local, or Tribal regulations also apply, comply with the most stringent requirement.

### Cleaning by Hand.

**REQUIRED FOR ALL PROJECTS:**

- All employees must wear proper Personal Protective Equipment (PPE) when cleaning by hand unless the cleaning product SDS states no PPE is required.
- Determine opportunities to replace single use cleaning products with reusable cleaning cloths.
  - Use a standard color-coded microfiber cloth system, with different colors for each area, surface type, or task.<sup>10</sup>
  - ~~Follow the below protocol for microfiber cloth maintenance:~~
    - ~~Store cloths used for restroom cleaning or on contaminated surfaces in a separate container after use and clean and *disinfect* as soon as possible.~~
    - ~~Clean and *sanitize* microfiber cloths used for general cleaning within 2 hours of use and/or at the end of each shift. Implement CDC guidelines to maintain microfiber cloths by laundering them in the warmest appropriate water setting, and drying items completely.~~
    - Do not reuse dirty microfiber cloths in other areas to prevent cross contamination.

---

<sup>10</sup> For ~~exampleexample~~, Red Cloths for sanitary appliances, restroom floors, toilets, and urinals, Yellow Cloths for restroom sinks, towels, hand dryers, soap dispensers, doors, walls, etc., Green Cloths for eating areas, lunch rooms, break rooms, kitchenettes, etc., Blue Cloths for low-risk areas including common rooms, offices, classrooms, etc.

- Ensure cleaning methods are compatible with the item being cleaned to avoid premature surface degradation.
- ~~All employees must wear proper Personal Protective Equipment (PPE) when cleaning by hand unless the cleaning product SDS states no PPE is required.~~
- Follow the label directions when spray bottles are necessary for product application.
- Follow CDC Guidelines<sup>11</sup> for cleaning high touch surfaces at least once per day or as often is determined necessary. High touch surfaces include, but are not limited to, counters, tables, doorknobs, light switches, handles, stair rails, elevator buttons, desks, keyboards, phones, toilets, faucets, and sinks. Use a tracking system to verify daily high-touch surface cleaning.
- ~~When spray bottles are necessary for product application, train personnel to spray product into cloth rather than onto surface or into air.~~

## Sanitizing Tasks.

### REQUIRED FOR ALL PROJECTS:

- All employees must wear proper PPE when conducting sanitizing tasks unless the product Safety Data Sheets (SDS) states no PPE is required.
- Always follow label directions for safe use of sanitizing products that are subject to the Federal Insecticide Fungicide Rodenticide Act (FIFRA).

## Disinfecting Tasks.

- ~~Follow the U.S. EPA's 6 Steps for Safe and Effective Disinfectant Use<sup>12</sup>~~

### REQUIRED FOR ALL PROJECTS:

- Follow CDC Guidelines<sup>13</sup> for determining when disinfection is needed and for disinfecting safely.
- Always Follow product label directions for preparing and using disinfection solutions.
- Wear proper PPE and safely dispose of materials and supplies after use.
- Follow the U.S. EPA's 6 Steps for Safe and Effective Disinfectant Use<sup>14</sup>
- ~~Clean and disinfect high-touch surfaces at least once per day, or more frequently as needed.~~
- Do not use products that contain quaternary ammonium compounds (quats).
- Disinfect high-touch surfaces at least once per day, or more frequently as needed. Use a tracking system to verify daily high-touch surface disinfection.
- Only use approved disinfectants in compliance with the school's district's procurement policy. In instances where a non-compliant product may be required, document the specific situation and why a non-compliant product was needed.

<sup>11</sup> <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

<sup>12</sup> <https://www.epa.gov/coronavirus/six-steps-safe-effective-disinfectant-use>

<sup>13</sup> <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

<sup>14</sup> <https://www.epa.gov/coronavirus/six-steps-safe-effective-disinfectant-use>

## Cleaning with Powered Equipment.

### REQUIRED FOR ALL PROJECTS:

Establish procedures for the use of powered equipment ~~in order to~~ clean effectively with minimum environmental impact.

- Ensure that any backpack vacuums, blowers, electrostatic sprayers, etc. have ergonomic harnesses and are properly fitted.
- Follow manufacturer's recommendations for powered equipment battery maintenance, storage, and charging. Staff must wear appropriate PPE when checking acid batteries.
- Inspect vacuum bags or canisters after every two hours of use. Replace bags or empty canisters when half full or when indicated by a bag sensor.
- Ensure powered equipment is properly maintained.

## Location Specific Cleaning Requirements

**UP TO 8 POINTS AVAILABLE**

Implement the following requirements in each building location.

For each space type described below, ensure personnel are aware of the process for reporting and communicating maintenance issues in need of repair, such as leaks, burned out lights, etc.

### Food Service, Dining Areas, and Break Rooms.

#### REQUIRED FOR ALL PROJECTS:

- Clean and sanitize surfaces in food preparation and consumption areas at least daily, and more frequently as needed, and in compliance with the most stringent applicable regulation.
- Clean and sanitize surfaces touched by hands daily or more frequently as needed, and in compliance with the most stringent applicable regulation.
- Clean and sanitize containers used for food waste daily, and in compliance with the most stringent applicable regulation. Empty waste containers once per day and when full.

#### OPTIONAL:

- Implement periodic ATP Monitoring<sup>15</sup> for food preparation surfaces. (2 points)

### Restrooms.

#### REQUIRED FOR ALL PROJECTS:

- List the equipment and cleaning supplies that must be used to comply with this standard and the school's restroom needs.
- Clearly label the equipment used for restroom cleaning (e.g., with a permanent marker or by color) as designated for restroom-only cleaning. Store all equipment for the cleaning of restrooms separately from other cleaning ~~equipment, and equipment and~~ maintain a written list of equipment and where it is located.

<sup>15</sup> ATP Monitoring is a rapid testing method used to quickly assess the cleanliness of surfaces or liquid samples.

- Conduct restroom cleaning from high to low, toward the doorway, with dry cleaning tasks performed before wet cleaning operations.
- Clean and *disinfect* areas where pathogens can collect and surfaces touched by hands daily, and more frequently in the event of high traffic volume or high occupancy levels.
- Remove standing moisture from the floors and bathroom surfaces.
- Designate color-coded cleaning process to ensure cloths used on toilets and urinals are not used on other surfaces. See “Cleaning by Hand and with Microfiber Cloths”
- Pull bathroom trash liners and *disinfect* trash receptacles, [including stall menstrual waste receptacles](#), at least once a day.
- **OPTIONAL:**
  - Provide adequate water deposits to effectively maintain the drain traps. If there are drains that do not receive regular wet cleaning operations, identify them and determine a maintenance process. [\(2 points\)](#)
  - ~~Replenish all consumable supplies daily.~~
  - ~~Require tracking and logging~~ [Track and log](#) daily high touch-point cleaning activities [for doorknobs, handles, and in-stall handrails](#) for verification. [\(2 points\)](#)

## Laundry.

### **REQUIRED FOR ALL PROJECTS:**

- Use the warmest-appropriate water [temperature](#) setting and dry items completely, [consistent with CDC guidance](#).
- If handling dirty laundry from a person who is sick, wear gloves and a mask.
- Clean clothes hampers and laundry baskets after they have held dirty laundry.
- Wash hands after handling dirty laundry.
- **OPTIONAL:**
  - Use an automated detergent dispensing system. [\(2 points\)](#)

## Entryways.

### **REQUIRED FOR ALL PROJECTS:**

- Clean outside entryways daily.
- Place walk-off matting at all building entryways: 6-10 feet of scraper/wiper matting, followed by 6-10 feet of wiper matting.<sup>16</sup>
- Vacuum matting daily, and as needed to prevent tracking of contaminants into the building.
- Evaluate matting regularly to ensure they stay in place during periods of high foot traffic, and that there is no bunching or curling edges. Replace worn or heavily used matting as needed.

## Laboratories.

### **REQUIRED FOR ALL PROJECTS WITH LABORATORIES:**

- PPE appropriate to the activities in the lab is required prior to entry.

<sup>16</sup> Exceptions: Smaller mat sizes may be accepted if the entry space is too small for the required sizes.

- Cleaning activities shall focus on the floors and high touch points including door handles, avoiding benchtops so as not to disturb experiments or mix chemicals.
- Lab owner/manager shall be responsible for cleaning and disinfecting test surfaces regularly in-between experiments.

[Requirements for this section are in development. Please submit suggestions.]

## Outside Cleaning.

### **REQUIRED FOR ALL PROJECTS:**

- Do not spray cleaning products or disinfectants in outdoor areas such as on sidewalks, roads, or groundcover.
- Implement a cleaning schedule to regularly clean high-touch surfaces made of plastic or metal, such as grab bars, play structures, and railings.
- Cleaning and disinfection of wooden surfaces (such as wood play structures, benches, tables) or groundcovers (such as mulch and sand) is not recommended.

[Requirements for this section are in development. Please submit suggestions.]

## Floor Maintenance

*INTENT: To establish a uniform, consistent process by which hard-floor surfaces in the building will be cleaned and maintained, using healthy and sustainable practices, products and tools, in order to reduce occupant exposures to environmental health hazards.*

### **REQUIREMENTS:**

Within each school site, meet the relevant requirements below.

### Routine Floor Maintenance.

**2 POINTS AVAILABLE**

For routine floor maintenance, vacuum floors or use mops equipped with reusable microfiber mop heads.

- Clean floors on a predetermined schedule and as needed to keep them clean.
- Scheduled daily cleaning for heavy traffic areas, including entrances, corridors, break areas, congested areas, main passageways, and primary work or office areas.
- Vacuum or mop as necessary to keep clean light traffic areas including conference rooms, administrative offices, auditoriums, media centers, limited access areas, and other areas or spaces with limited or periodic use.

### Periodic or Restorative Maintenance.

**2 POINTS AVAILABLE**

For periodic and restorative maintenance of floors:

- Schedule floor stripping and refinishing during periods of minimum occupancy.

- Provide reasonable notice to building occupants before non-routine floor maintenance operations. Establish the timing and method of the notice in consultation with building management.
- Ensure that sufficient floor finish exists on the floor surface before performing periodic maintenance, in order to avoid damage to the flooring.
- Avoid spraying floor restoration chemicals.
- Perform restoration only when needed, rather than on a predetermined schedule.
- Use burnishing or buffing equipment capable of capturing the dust generated by the equipment.
- Ventilate the area to the outside if possible, both during and after floor stripping, floor scrubbing or recoating.

## Carpet Cleaning and Maintenance

***INTENT:** To establish a uniform, consistent process by which carpets/soft flooring in the facility will be cleaned and maintained, using healthy and sustainable practices, products and tools, [in order to reduce occupant exposures to environmental health hazards.](#)*

### REQUIREMENTS:

#### Routine Maintenance.

**2 POINTS AVAILABLE**

For routine carpet maintenance, vacuum carpets on a predetermined schedule, and as needed to keep them clean.

- Vacuum daily: heavy traffic areas, including entrances, corridors, break areas, congested areas, main passageways, and primary work or office areas.
- Vacuum periodically to keep clean: light traffic areas including conference rooms, administrative offices, auditoriums, media centers, limited access areas, and other areas or spaces with limited or periodic use.

#### Interim or Restorative Cleaning.

**UP TO 2 POINTS AVAILABLE**

Implement the following strategies:

- Provide reasonable notice to building occupants before interim or *restorative carpet cleaning* operations.
- Perform carpet extraction only as needed rather than on a regular schedule.
- Clean carpets so that they will dry in less than 4 hours.
- Schedule carpet extraction during periods of minimum occupancy.
- Take adequate precautions to limit worker exposure to dust and particulate matter from vacuum cleaners when cleaning and replacing bags and filters.
- Do not use propane-powered equipment indoors when the building is occupied.

- Provide the maximum air circulation and exchange possible when using propane powered equipment indoors.

## Waste Handling and Recycling

*INTENT: To implement healthy, safe, and sustainable cleaning practices, maintain a waste-free environment, ~~and~~ prevent inappropriate odors and pests, and reduce occupant exposures to environmental health hazards.*

### REQUIREMENTS:

Within each school site, meet the relevant requirements below.

### Waste and Recycling Storage.

**REQUIRED FOR ALL PROJECTS**

- Store all recyclable waste items in separate containers to be recycled.
- Dispose of trash outside in covered containers away from the immediate exterior of the building.
- ~~[Requirements for compost storage are being developed. Please submit suggestions.]~~

### Waste and Recycling Collection.

**UP TO 4 POINTS AVAILABLE**

#### **Waste/Trash. (1 point)**

For waste containers not addressed elsewhere in the standard, implement the following requirements:

- Use uniform color and branding standards to distinguish trash bins from other containers.
- Remove trash and replace liners daily if possible or when they are soiled from wet trash or ~~feed, or food~~ or become broken.
- Ensure that the waste/trash stations are marked clearly. Properly label waste bins with both text and images to ensure occupants know what materials are appropriate to throw away.
- Dispose of all trash before weekends and holidays.
- Ensure personnel have tools (e.g., reachers) that allow for safe and ergonomically appropriate trash collection.

#### **Recycling. (1 point)**

Where a recycling program exists, implement the following requirements:

- Use uniform color and branding standards to distinguish recycling bins from other containers.

- Use restrictive openings to control what can be placed inside of recycling bins.
- ~~• Inspect recycling areas daily, including collection bins, and clean them if they are dirty.~~
- Ensure that the recycling stations are marked clearly. Properly label recycle bins with both text and images to ensure occupants know what materials can be recycled
- ~~• Inspect recycling areas daily, including collection bins, and clean them if they are dirty.~~
- 
- Collect recyclable materials that have come in contact with food or beverages and remove them from the building before weekends and holidays.
- Determine, together with the facility management personnel:
  - procedures for rinsing and separation of recyclables
  - locations and procedures for collecting recyclables
  - how to ensure that recycling stations are accessible
- Periodically review the status of the recycling program, including effectiveness and any problems regarding separation or collection of recyclable materials.

**Compost. (1 point)**

Where a compost program exists, implement the following requirements:

- Use uniform color and branding standards to distinguish composting bins from other containers.
- Use restrictive openings to control what can be placed inside of composting bins.
- Ensure that the compost stations are marked clearly. Properly label compost bins with both text and images to ensure occupants know what materials are appropriate to compost.
- Empty food compost containers ~~on a daily basis~~daily or as needed.
- Empty paper towel compost once a week.

**Communication. (1 point)**

Display easy-to-understand instructional signage at all public waste collection stations. Provide education and outreach to your community to engage them in waste diversion action.

## Back of House Procedures – Material Handling and Storage

**UP TO 5 POINTS AVAILABLE**

~~*INTENT: To promote safety and reduce risk of injuries from chemical and equipment handling and management.*~~

### Material Handling and Storage

~~*INTENT: To maximize cleaning efficacy and minimize product inventory levels, while minimizing the negative impacts to human health and the environment*~~exposure to environmental health hazards.

**REQUIREMENTS:**



### **REQUIRED FOR ALL PROJECTS:**

Implement the following strategies for safe material handling and storage.

- Establish locations for the storage of cleaning products within the facility, and establish requirements for proper ventilation, adequate security, safety, and proper management of the area.
- Ensure proper labeling of chemicals in storage, as well as hand-held spray bottles.
- [Require all employees to wear proper PPE, per product SDS, when handling chemicals.](#)
- [Keep the chemical inventory posted in the storage area to clearly articulate the current list of supplies and help identify products in need of ordering.](#)
- Provide easily understood directions for the dilution of cleaning products to cleaning staff in their spoken language.
- [Provide directions for the proper rinsing and disposal of leftover cleaning products and empty containers.](#)
- [Keep product SDS readily available and communicate their location to staff.](#)

### **OPTIONAL:**

- Implement a First In, First Out Chemical Usage Policy. (1 point)
  - The policy should cover, at minimum, the following:
    - approved chemicals for purchase
    - procedures for labeling, dating, and inspecting materials when they are received
    - keeping records for date of receipt
    - using old stock of chemicals first
    - labeling chemicals with a “date opened” sticker to track original use
    - inventorying of materials
    - disposal procedures for expired or damaged chemicals or product containers
- Spill Kits (1 point)
  - Create a spill kit for any enclosed room where chemicals are stored with at least the following materials, as necessary:
    - a container to hold spill debris.
    - granular absorbent, absorbent pads and broom, as appropriate.
    - plastic dustpan and broom for sweeping up granular absorbent. For flammable materials, ensure the dustpan is a spark-free tool.
    - for larger spills, consider a pump to empty leaking drums as well as plugs and patching materials for drums.
    - rags to wipe up smaller areas.
    - labels (e.g., Hazardous waste stickers) to properly mark containers of spill debris.
    - forceps, tongs, or other tools to pick-up contaminated debris or broken glass.
    - oil absorbent brooms.
    - written Chemical Spill Kit Procedures and Instructions, in all languages used by staff.
    - basic first aid kit
    - Hydrofluoric Acid: Calcium gluconate gel (2.5%) for skin contact
    - Chloroform/Phenol: Isopropanol, polyethylene glycol 300, or polyethylene glycol 400 for skin contact

- Dilution Control (1 point)
  - Dilute cleaning products in concentrate form using dilution control that limits worker exposure.
  - Conduct periodic checks of the dilution control system to ensure the proper chemical ratio is produced through methods such as test strips, calibration of the dilution system, or other quantitative check.
- Closed Dilution Control System (2 points)
  - [Use Closed Dilution Control Systems across the district that meets the requirements defined in Green Seal GS-37 Edition 7.6, Annex B and/or C.](#)

## Powered Equipment Maintenance

*INTENT: To minimize the impact on occupant and user safety, health and environment from powered equipment.*

### REQUIREMENTS:

Within each school site, meet the relevant requirements below.

### General Powered Equipment Maintenance.

**UP TO 3 POINTS AVAILABLE**

Implement the following requirements:

#### REQUIRED FOR ALL PROJECTS:

- Ensure that the equipment functions properly or is tagged out of service.
- Use equipment for its full service life.
- ~~● Develop a plan for the phase-out of equipment.~~
- ~~● Establish a quarterly maintenance program to inspect and maintain all equipment, according to manufacturer recommendations.~~
- Use a maintenance log to keep a record of cleaning and repairs.
- Ensure equipment is cleaned of old product used (e.g., oil).
- ~~● Establish a battery maintenance schedule.~~
- Store equipment properly per manufacturer's recommendation.

#### OPTIONAL:

- ~~● Establish a quarterly maintenance program to inspect and maintain all equipment, according to manufacturer recommendations. (1 point)~~
- ~~● Establish a battery maintenance schedule. (1 point)~~
- ~~● Develop a plan for the phase-out of equipment. (1 point)~~
-

## Vacuum Cleaner Maintenance.

**REQUIRED FOR ALL PROJECTS**

Implement the following requirements:

- Equip vacuum cleaners with the proper filter or bag; change or clean filters according to manufacturer recommendations.
- Take precautions to limit worker exposure to dust and particulate matter when cleaning and replacing bags, filters and HEPA if applicable.

## Section 6: Building Systems Maintenance and Repairs

*INTENT: To protect the health and safety of building occupants and improve the indoor air quality, water quality, and reduce environmental health hazards in school facilities by through a comprehensive plan that addresses preventative maintenance, routine maintenance, and reactive maintenance promoting building system maintenance and repairs.*

**REQUIREMENTS:**

- Use a computerized maintenance management system (CMMS).
  - Establish and document a response plan that prioritizes issues based on their scope, urgency and impact on the safety, health, and wellness of building occupants.
  - Establish a pathway to increase transparency on reporting outcomes from the maintenance management plan.
- Where Federal, State, Local, or Tribal regulations also apply, comply with the most stringent requirement.

### Heating, Ventilation, and Air Conditioning (HVAC) Systems.

**UP TO 10 POINTS AVAILABLE**

*INTENT: To ensure the proactive, preventative, planned and reactive maintenance of all installed HVAC devices and fixtures to maximize their period of usefulness; ~~to promote a high standard of air quality~~ and improve the indoor air quality of school facilities.*

**REQUIREMENTS:**

**REQUIRED FOR ALL PROJECTS:**

Establish and document a maintenance plan, including at minimum the following requirements:

- Inspect HVAC systems regularly. Change filters quarterly, ensure proper filter fit, and confirm that condensate pans are draining. Use the U.S. EPA's Ventilation Checklist<sup>17</sup> from Tools for Schools to examine outdoor air intakes, system cleanliness, outdoor air supplies, air distribution, exhaust systems, and quality of outdoor air.
- Regularly clean air supply diffusers, return registers, and outside air intakes.
- Ensure that outside air intakes are working properly. Ensure no standing water is in the vicinity of the air intakes.
- Ensure that the building automation system plus all dampers, actuators, and physical system components are working as designed.

<sup>17</sup> <https://www.epa.gov/iaq-schools/ventilation-checklist-indoor-air-quality-tools-schools>

### OPTIONAL:

- Provide outdoor air ventilation according to the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Standard 62.1-2016 or local code. (2 points)
- Use air filters labeled as a minimum of MERV-13A when tested in accordance with ASHRAE 52.2 with Appendix J or the highest MERV-A value filter the existing system will allow. (2 points)~~Use MERV 13 filters or the highest rated filter the existing system will allow.~~
- ~~● Inspect HVAC systems regularly. Change filters quarterly, ensure proper filter fit, and confirm that condensate pans are draining.~~
- ~~● Regularly clean air supply diffusers, return registers, and outside air intakes.~~
- ~~● Ensure that outside air intakes are working properly. Ensure no standing water is in the vicinity of the air intakes.~~
- ~~● Ensure that your building automation system plus all dampers, actuators, and physical system components are working as designed.~~
- Anticipate replacement plan based on life-cycle cost of the equipment (2 points)
- Where adequate ventilation and air exchange for occupancy level per CDC Guidance for Ventilation in Schools and Childcare Programs<sup>18</sup> is not provided through the HVAC system alone, provide supplemental air cleaning systems for all classrooms and other areas of assembly. This may include (but is not limited to), (e.g., open windows, UV-C, bipolar ionization,<sup>19</sup> or stand-alone/standalone HEPA filtration units, etc). (4 points)

## Water.

**UP TO 8 POINTS AVAILABLE**

*INTENT: To provide a safe, potable water distribution system for building occupants. ~~To and~~ provide testing and treatment of ~~non-potable~~ non-potable water usages, reducing potential environmental health hazards from water sources.*

### REQUIREMENTS:

Establish and document a maintenance plan, including at minimum the following requirements:

### REQUIRED FOR ALL PROJECTS:

- Ensure any new plumbing installed is compliant with the Safe Drinking Water Act (NSF/ANSI 61 Annex G).
- Ensure any solder used for plumbing providing drinking water is of 95/5 composition.

### OPTIONAL:

- Establish a potable water testing protocol that is in compliance with follows the U.S.

<sup>18</sup> <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/ventilation.html>

<sup>19</sup> Only bipolar ionization units that meet UL 2998 standard certification (Environmental Claim Validation Procedure (ECVP) for Zero Ozone Emissions from Air Cleaners)

EPA's 3Ts for Reducing Lead in Drinking Water Toolkit.<sup>20</sup> (2 points)

- Create and document an action plan in the event an emergency creates water quality issues. (2 points)
- ~~● Establish a maintenance protocol for backflow preventers, floor drains and air gaps. (1 point)~~
- ~~● Ensure any new plumbing installed is compliant with the Safe Drinking Water Act (NSF/ANSI 61 Annex G).~~
- ~~● Ensure any solder used for plumbing providing drinking water is of 95/5 composition.~~
- Establish a water treatment protocol for cooling towers. Document testing. (1 point)
- ~~● Establish a maintenance protocol for backflow preventers, floor drains and air gaps.~~
- Follow the Center for Disease Control and Prevention (CDC) guidance for restoration of services to dormant buildings or fixtures when needed. (2 points)

## Pest Management.

**8 POINTS AVAILABLE**

*INTENT: To protect occupants from environmental health hazards and improve the indoor air quality of school facilities.*

### REQUIREMENTS:

Create and implement an Integrated Pest Management Plan using the Penn State Extension U.S. Green Building Council's Integrated Pest Management Plan Template,<sup>24</sup> which covers:

- ~~● Goals/Performance Measurement~~
- ~~● Roles and Responsibilities~~
- ~~● Standard Operating Procedures And Implementation Strategies for
  - ~~○ Pest Control~~
  - ~~○ Pesticide Application Notification~~
  - ~~○ Building Occupant Communications Plan~~
  - ~~○ Action Thresholds for Various Pests~~~~
- ~~● Performance Measurement and Schedule for Reassessment~~
- Quality Assurance/Quality Control Processes IPM for Pennsylvania Schools and Childcares How to Manual or locally required equivalent, whichever is more stringent.

Comply with the requirements of the U.S. Green Building Council's Integrated Pest Management Credit, as found in LEED O+M: Existing Buildings, v4.1, Indoor Environmental Quality - Integrated Pest Management.<sup>22</sup>

<sup>20</sup> <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit>

<sup>24</sup> <https://www.usgbc.org/resources/v41-egc-integrated-pest-management-plan-template>

<sup>22</sup> <https://www.usgbc.org/credits/existing-buildings-interiors-existing-buildings-retail-existing-buildings-schools-0?return=/credits/Existing%20Buildings/v4.1>

Ensure workers adhere to relevant personnel licensing requirements.

## Sidewalk, Pavement, and Grounds Maintenance.

### Site Management Plan

**6 POINTS AVAILABLE**

*INTENT: To protect occupants from environmental health hazards at school facilities.*

#### REQUIREMENTS:

Create and implement a Site Management Plan using the U.S. Green Building Council's Site Management Policy Template,<sup>23</sup> which covers:

- Goals/Performance Measurement
- Roles and Responsibilities
- Standard Operating Procedures And Implementation Strategies for
  - Maintenance Equipment
  - Snow and Ice Removal
  - Erosion and Sedimentation Control
  - Addition of Organic Matter Mulch to Planting Areas
  - Invasive and Toxic Species Management
  - Fertilizer Usage
  - Herbicide, Pesticide, And Fungicide Usage And Integrated Pest Management Plan
  - Irrigation Using Automatic Controlled Systems
  - Irrigation Management
  - Storage of Materials and Equipment
- Performance Measurement and Schedule for Reassessment
- Quality Assurance/Quality Control Processes

Comply with the requirements of the U.S. Green Building Council's Site Management Credit, as found in LEED O+M: Existing Buildings, v4.1, Sustainable Sites - Site Management.<sup>24</sup>

Ensure workers adhere to relevant personnel licensing requirements.

## Hardscape and Pavement Maintenance

**REQUIRED FOR ALL PROJECTS**

*INTENT: To protect occupants from safety hazards at school facilities.*

<sup>23</sup> <https://www.usgbc.org/resources/v41-ssc-site-management-policy-template>

<sup>24</sup> <https://www.usgbc.org/credits/existing-buildings-interiors-existing-buildings/v41/ss118?return=/credits/Existing%20Buildings/v4.1>

REQUIREMENTS:

Monitor the condition of entryways, sidewalks, parking areas, and roadways on school sites for damage and disrepair. On an as needed basis, replace cracked and sunken concrete, potholes in pavement, etc. to reduce the potential for injuries.



---

## Section 7: Monitoring and Evaluation

---

### Indoor Air Quality ~~Testing~~ Monitoring ~~Monitoring and Energy Management~~

**UP TO 15 POINTS AVAILABLE**

*INTENT: To ensure processes, procedures and tools are in place to monitor indoor air quality, while balancing the impact of HVAC on energy consumption, and help to identify opportunities to improve indoor air quality in schools.*

#### REQUIREMENTS:

### Carbon Dioxide Monitoring

**REQUIRED FOR ALL PROJECTS**

- Utilize at a minimum handheld and logging monitors to monitor CO<sub>2</sub> levels during times of occupancy within each school building in the district, at least once per calendar quarter.
- Create and document an action plan for when CO<sub>2</sub> levels exceed 900 ppm. Create and document an action plan in the event an emergency creates air quality issues.

### Ongoing Monitoring for Contaminants

**5 POINTS AVAILABLE**

Establish and implement a plan to monitor indoor air quality, including monitoring frequency, contaminants to monitor, acceptable levels, and building spaces tested~~and action plans for addressing excessive concentrations.~~ Include at least the following contaminants:

- Carbon Dioxide (CO<sub>2</sub>)
- Mold
- Mildew
- Total Volatile Organic Compounds (VOCs) and formaldehyde
- Radon
- PM<sub>2.5</sub> and/or PM<sub>10</sub>
- Ozone
- Other elements that affect indoor air quality, such as bus diesel exhaust, sewer gas, and natural gas venting.

## Action Planning to Address IAQ Issues

**UP TO 7 POINTS AVAILABLE**

Implement any of the following strategies as appropriate for ~~contaminant monitoring and action planning~~esting and monitoring.

- ~~Utilize at a minimum handheld and logging monitors to monitor CO<sub>2</sub> levels during times of occupancy.~~
- ~~Create and document an action plan for when CO<sub>2</sub> levels exceed 900 ppm. Create and document an action plan in the event an emergency creates air quality issues.~~
- Create and implement an action plan for addressing mold and mildew consistent with the U.S. EPA's Tools for Schools Appendix H, Mold and Moisture.<sup>25</sup> (1 point)
- Create and implement an action plan for addressing radon, volatile organic compounds (VOCs), formaldehyde, PM<sub>2.5</sub> and/or PM<sub>10</sub>, ozone, and other elements that affect indoor air quality, such as bus diesel exhaust, sewer gas, and natural gas venting. (2 point)
- At least quarterly, interview building occupants in schools with frequent IAQ issues to help identify problem areas. Include the school nurse and any other staff member who regularly engage with the school population to identify potential trends in the incidents of health complaints. (1 point)
- Monitor relative humidity to maintain industry accepted standards as described in the U.S. EPA Tools for Schools Program. (1 point)
- Develop and implement an Asbestos Hazard Emergency Response Act (AHERA) Management Plan for asbestos remediation. (1 point)
- ~~Develop a risk management plan and, when required, use third party testing. Create and document an action plan in the event an emergency creates air quality issues. (1 point)~~

## Reporting on IAQ Issues

**3 POINTS AVAILABLE**

At least annually, report to the school community at minimum, the following information:

- IAQ issues found in schools across the district,
- the scope and scale of the issues,
- remediation activities underway,
- the distribution of IAQ issues by school population demographics
- areas of disproportionate IAQ impact by school population demographics, and
- any other relevant trends indicated by the data

## Performance Measurement, Metrics and Data Tracking

**3 POINTS AVAILABLE**

### INTENT:

*Use data to strategically inform budget and operations decisions.*

<sup>25</sup> [https://www.epa.gov/iaq-schools/reference-guide-indoor-air-quality-schools#IAQRG\\_AppendixH](https://www.epa.gov/iaq-schools/reference-guide-indoor-air-quality-schools#IAQRG_AppendixH)

REQUIREMENTS:

- Document the size and age of facilities.
- Track the amount of work orders written against building inventory.
- Identify the exact nature of the need to use the right staffing resources.
- Monitor work order progress to ensure all schools within the district receive timely attention to maintenance and operations matters.

## Staffing Formulas

**2 POINTS AVAILABLE**

INTENT:

*Ensure ~~the operation is properly~~proper staffing is utilized to execute the mission assigned based on industry best practices effectively promote health, safe, sustainable, and equitable facilities management practices.*

REQUIREMENTS:

- Staffing formulas shall be used when making staffing decisions.
- These formulas should consider building size, occupant load, ~~and~~ space usage, and unique needs of student populations.

---

# Glossary

---

**Concentrate.** A product that must be substantially diluted with water to form the appropriate solution for use (~~typically to comply with the requirements of Green Seal GS-37, glass, restroom, and carpet cleaners must be concentrated to at least 1:16; general purpose cleaners must be concentrated to at least 1:32~~at least 1:16).

**Dilution Control.** A procedure that controls the proper dilution of a concentrated product while limiting worker exposure. Examples include tablets, dissolvable film pods, closed dilution systems, and pre-measured pouches.

~~**Disinfect.** Destroying infectious microorganisms (bacteria, viruses, and/or mold/mildew) present on hard surfaces.~~ **Disinfect.** Destroying infectious microorganisms present on hard surfaces.

**Environmentally Preferable Product.** A product certified as such by a Type 1 (i.e., third-party) environmental label that was developed in accordance with the ISO 14024 Environmental Labeling Standard. Alternatively, a product may be designated as environmentally preferable by an established and legitimate, ~~nationally recognized~~nationally recognized program developed with the purpose of identifying environmentally preferable products. The program must not have any financial interest or stake in sales of the product, or other conflict of interest. Such designation must be based on consideration of human health and safety, ecological toxicity, other environmental impacts, and resource conservation, as appropriate, for the product and its packaging, on a life cycle basis. Product criteria must distinguish market leadership<sup>26</sup> for that product ~~category, and~~category and be publicly available and transparent.

**Restorative Carpet Cleaning.** Used when accumulated soils and cleaning residues need to be extracted to return the carpet to a relatively clean (free of unwanted matter) condition or when interim cleaning systems are not achieving desired results.

~~**Sanitize.** Reducing bacteria to levels specified by public health codes or regulations. (Per EPA: Sanitizing kills bacteria on surfaces using chemicals. It is not intended to kill viruses.)~~ **Sanitize.** Reducing microorganisms to levels specified by public health codes or regulations.

---

<sup>26</sup> As defined by Green Seal, market leadership is typically a product in the top 20% of the North American marketplace in terms of health and environmental performance; a manufacturer's product is significantly healthier and safer for the environment than conventional products that provide the same function. Conformance to requirements reflects sustainability leadership across the supply chain, including specific and measurable attributes of the final product formula that result in safer use and safer product disposal. Product category standards set requirements for functional performance, prohibitions on individual or categories of hazardous chemicals, restrictions for chemicals that are hazardous at higher concentrations, low-impact packaging, and other requirements as appropriate.

**Vulnerable Population.** Occupants, customers, or employees who are more susceptible than the general population to health risks that may be posed by cleaning operations. Examples of such populations include children, pregnant women, asthmatics, the elderly and infirm, and people with chemical sensitivities (e.g., to fragrances, [pathogens, or environmental soils](#)).