

Prince George's County Public Schools

Indoor Air Quality Management Plan

Table of Contents

Indoor Air Quality Management Plan	1
Table of Contents	2
Mission Statement	3
Roles and Responsibilities	3
Staff Responsibilities for Maintaining Good IAQ	4
Background and IAQ Findings	5
Indoor Air Quality Monitoring and Reporting	5
Asbestos Hazardous Emergency Response Act Management Plan	6
Asbestos Training of Employees	7
Asbestos (A.H.E.R.A.) Inspections	7
Six Month Surveillance Activities	7
Notice of Availability of Asbestos Management Plans	7
Temperature Monitoring and Control	8
Mold and Moisture Control	9
Remediation	9
Environmental Sampling	10
Integrated Pest Management Plan	10
Chemical Management	11
Anti-Idling	11
Tobacco and Nicotine-Free Environment Policy	11
Lead in Water	12
Lead in Paint	12
Emergency Response	13
Combustion Odor Complaints	13
Chemical Spills	13
Steps for Prevention	13
Preventative Maintenance and Repair of Buildings	14
Applicable Federal, State, and District Requirements or Guidance	16
Federal Guidance	16
State Guidance	16
District Policies and Procedures	16

Mission Statement

Prince George's County Public Schools (PGCPS) recognizes the importance of providing a healthy learning environment for all students and staff members. PGCPS strives to provide and maintain a safe and healthy work and learning environment in accordance with all known, applicable standards, laws, regulations, and guidelines.

Roles and Responsibilities

PGCPS IAQ Management Team: The PGCPS Building Services Environmental Office provides a healthy learning environment for students at all schools as well as a safe working environment for staff. This is accomplished by ensuring that the air and water are safe; and that asbestos is not exposed. The Environmental Office is responsible for providing the tools and resources necessary to implement the PGCPS IAQ Management Plan, and for ensuring that the provisions in the Plan are being followed.

The following staff will play a critical role in supporting the IAQ Plan:

Environ AHERA Inspector- Under the direction of the Environmental/Asbestos Program Specialist, performs asbestos related activities as mandated by the Asbestos Hazard Emergency Response Act (AHERA) and tasks related to ensuring a safe and healthy learning environment for school facilities

Pest Controller-The Pest Controller performs lead supervisory and skilled work in the control and extermination of rodents and insects. This position is responsible for safeguarding the health of students, faculty and staff of Prince George's County Public Schools through the informed use of appropriate pest control measures in compliance with federal and state laws.

Licensed Lead Environmental Assistant- Under the supervision of the Environmental Program Specialist (EPS), the Licensed Lead Environmental Assistant will assist the EPS in the administration of all programs associated with environmental and safety issues. An employee in this class will assist in the administering of the program concerned with problem identification, quantification, and resolution of environmental and safety issues in all Board of Education schools and buildings.

The Environmental Office's responsibilities include:

- Facilities inspections
- Removal of exposed asbestos

- Coordinates and Manages Projects with Capital Programs
- Test and maintain water quality
- Test and maintain air quality
- Test and remediate lead based paint
- Training
- Receive, document, and initiate investigation as necessary

Staff Responsibilities for Maintaining Good IAQ

The PGCPs IAQ Management Team also includes support from the following trades and areas within Building Services: HVAC technicians, Building Automation, Facility Coordinators, and Building Supervisors.

Building Occupants: All PGCPs staff, students, families, and visitors responsibilities include:

- Review all PGCPs IAQ Management Plan materials.
- Follow school and school district policies.
- No smoking or vaping on PGCPs property, per the [Board Policy 0129-Possession and Use of Alcohol, Tobacco, and Drugs on School Property](#).
- Follow all anti-idling laws under Maryland Transportation Code § 22-402 when using vehicles adjacent to PGCPs buildings, particularly during drop-off and pick-up of students.
- Never touch, tamper with, block, or turn off IAQ sensors or HVAC systems.
- Report IAQ concerns to the Main Office staff, who shall then be responsible for relaying the concerns to the PGCPs Environmental Division if the building supervisor is unable to do so.
- Report repairs needed for HVAC systems, leaks, windows, and doors to your school's Main Office. School leaders, Administrative staff, or Custodians shall then report these issues to Building Services via the PGCPs Work Order System if unable to handle.
- Report spills immediately to the Custodial Staff.
- Do not use personal portable air-cleaning or ozone-generating devices; air fresheners, scented candles, scented personal care products, or other scented materials. These items can add irritating chemicals to the indoor air and trigger asthma.
- Discard all waste and recycling into the appropriate containers, following [Administrative Procedure 2810-Recycling Program](#).
- Declutter your space. Clutter collects dust, an asthma trigger, harbors pests, and impedes the Integrated Pest Management contractor from inspecting and treating areas, impedes Custodial cleaning of surfaces and floors, and blocks inputs and outputs on

HVAC systems. Clutter can also be a fire hazard, particularly in electrical closets, where storage is prohibited.

- Do not bring animals (except service animals) into PGCPS buildings.

Background and IAQ Findings

Asthma is the leading cause of school absenteeism in the United States. Asthma triggers and allergens in our schools such as mold, dust, pests, chemicals and outdoor pollutants affects students and staff by making it hard to concentrate and can mean frequent visits to the nurse office and missed school time.

PGCPS's proactive testing initiative in 2018-2019 confirmed the importance of managing factors like ventilation, moisture control, chemical sources, and outdoor pollutant entry. Identified areas for continuous focus include humidity management, proactive filter changes, and immediate leak repair.

The PGCPS IAQ Management Plan applies to all school buildings (owned and leased) regularly occupied by PGCPS students and staff. The plan will help to improve IAQ in all PGCPS school buildings, as indicated by the U.S. Environmental Protection Agency (EPA) tools for schools guidance.

Indoor Air Quality Monitoring and Reporting

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PGCPS's proactive testing initiative in 2018-2019 confirmed the importance of managing factors like ventilation, moisture control, chemical sources, and outdoor pollutant entry. Identified areas for continuous focus include humidity management, proactive filter changes, and immediate leak repair. Indoor Air Quality reports can be found on the Environmental Office website.

PGCPS has adopted IAQ standards following federal, state, and local recommendations on indoor air quality and ventilation in schools and PGCPS Environmental Office will take action based on those recommendations.

Asbestos Hazardous Emergency Response Act Management Plan

The school system is licensed by the State of Maryland to remove and/or encapsulate asbestos materials. Maryland regulates all friable materials and any non-friable materials which may become friable during renovation, demolition or asbestos removal projects. Asbestos Hazard Emergency Response Act (A.H.E.R.A.) regulations require school systems to identify all asbestos-containing materials (ACM) and to track activities performed on them. This includes ensuring that any work performed is done by accredited workers as well as having clearance air sampling reports and disposal manifests for the material(s) removed. Basically, we have to account for all ACM identified when the buildings were inspected.

We are required to notify the State and the Maryland Department of Energy 10 working days prior to starting a NESHAP size project. This includes non-friable materials that may become friable. The form is self-explanatory. The original goes to the Maryland Department of the Environment and a copy to the United States Environmental Protection Agency Via the mail.

On NESHAP sized projects, we usually meet with the building's principal and/or staff to discuss the project prior to beginning any work. We prepare a draft "Dear Parent/Guardian/Staff Member" letter (site & project-specific) for the notification purposes. Every effort is made to have our in-house crew perform work in occupied buildings.

We also prepare specifications and evaluate bids for contracted asbestos work. Environmental Office personnel monitor all asbestos abatement activities.

Copies of clearance sampling reports and waste disposal manifests for in-house projects must be sent to the MDE as soon as they are available. Contractors are responsible for submitting these documents for projects they perform. We provide copies of clearance sampling reports to the contractor, and he/she must submit a waste manifest before the final payment is authorized. Copies of all air testing and disposal manifests are required to be inserted in the Building's Asbestos Management Plan.

On smaller sized jobs (less than NESHAP), crews are supposed to submit an ASBESTOS WORK NOTIFICATION/AUTHORIZATION form to the Environmental Office prior to working on more than 3 square or 3 linear feet of asbestos-containing material. Environmental Office personnel verifies the submitted information and permission to proceed is given as long as the work can be accomplished safely. Emergency jobs in this category must be called into the Environmental Office prior to beginning work. The above-mentioned paperwork is to be completed and sent as

soon as possible. Maintenance employees are allowed to do jobs consisting of less than 3 square or 3 linear feet without prior authorization as long as they follow the Maintenance Department Asbestos Work Policy and Procedures document. All required paperwork must be submitted after the work is completed.

Asbestos Training of Employees

We solicit prices for all regulated classes as part of our yearly Industrial Hygienist Services account. Most training occurs in January. Abatement workers can not perform any removal activities if their certification lapses. There is a one-year grace period for retraining without the affected person having to retake the complete class. However, that individual is prohibited from removing materials other than small scale, short duration type of work.

Operational and maintenance activities (normal work around asbestos materials) can be done by anyone who has received 16 hours of asbestos training. The State requires yearly re-certification for O & M workers; however, our employees do not fall under that prerequisite since all removal of friable asbestos material is undertaken by the Abatement Crew. Additionally, our maintenance employees deal mostly with non-friable materials that aren't regulated in Maryland (unless rendered friable). A price for this class is solicited with the In House Services Contract.

Asbestos (A.H.E.R.A.) Inspections

Mandated (A.H.E.R.A.) asbestos inspections are performed by the inspectors assigned to the Environmental Office. The law requires all facilities to be reinspected once, every three years. We perform the required inspection in one-third of the systems' buildings each year. The Asbestos Management Plans are updated accordingly.

Six Month Surveillance Activities

The (A.H.E.R.A.) mandated six-month surveillance activities are performed by the inspectors assigned to the Environmental Office.

Notice of Availability of Asbestos Management Plans

In accordance with the Asbestos Hazard Emergency Response Act (AHERA), the PGCP Environmental Office has prepared asbestos management plans for all schools and support buildings. The asbestos management plans list the amount, location and condition of asbestos-containing material in the respective building, including diagrams and the results of laboratory analysis.

The asbestos management plans were prepared by PGCPs personnel specially trained and accredited to assess the risk posed by asbestos-containing materials.

PGCPs asbestos management plans are available to the public for review. The management plans are located in the administrative office at each school, as well as in the Facilities Administration Building, 13300 Old Marlboro Pike, Upper Marlboro, Maryland 20772. Please contact the PGCPs Building Services at (301) 952-6500 to make an appointment to review the plans.

If you have any questions regarding the PGCPs asbestos management plans, please contact Building Services, at (301) 952-6500.

Temperature Monitoring and Control

Energy conservation guidelines, established through Bulletin S-46-96 for the heating season (October 20th to April 15th) and Bulletin S-90-93 for the cooling season (May 5th to October 15th), detail specific thermostat settings across different facility types and areas, emphasizing that thermostats must not be tampered with under any circumstance. During the heating season, Special Education Centers are set to 72°F throughout. Elementary Schools maintain 72°F in health rooms, 68°F in classrooms and offices, 65°F in multi-purpose (MP) rooms and gyms, and a cooler 55°F in halls, bathrooms, and storage areas. Secondary Schools and Administrative Offices have health rooms at 72°F, classrooms, offices, halls, bathrooms, and storage areas at 65°F, and MP rooms and gyms at 60°F. For the cooling season, Special Education Centers are set to 75°F, while all other air-conditioned locations are set to 78°F. Additionally, boilers must be maintained in the day AND auto position; for assistance, contact telephone line 301-952-6500. The temperature standard for PGCPs is the thermal comfort guideline of 68–78°F.

The PGCPs Building Automation team will monitor school temperature readings, and respond to high and low temperatures by making adjustments to heating and cooling settings to return spaces to the 68-78°F thermal guideline (where we have automation). Response actions shall also include, but not be limited to: replacing a faulty temperature sensor, investigating the HVAC equipment (if applicable), and/or making recommendations to achieve optimal ventilation.

Mold and Moisture Control

Fungi (mold) are present everywhere and can be a cause of illness, health symptoms, and

discomfort. In an indoor environment, hundreds of different kinds of mold are able to grow wherever there is moisture and an organic substrate (food source). Indoor mold growth can be prevented or minimized by actively maintaining, inspecting, and correcting buildings for moisture problems and immediately drying and managing water damaged materials. Removing mold growth and correcting the underlying cause of water accumulation can also help reduce mold exposures. School staff should be aware that the easiest way to control microbial growth is to control moisture.

Rapid remediation of mold damaged materials and infrastructure repairs to stop the source of water should be the primary response to mold growth in buildings. The simplest, most expedient remediation that properly and safely removes mold growth from buildings should be used. Found below is the PGCPs Guideline for Assessment & Remediation of Indoor Mold, based on guidelines from the U.S. EPA.

Following a report of mold, a visual inspection is conducted by the PGCPs Environmental Division, custodial, or maintenance staff to identify any possible mold problem and determine remedial strategies. The extent of any water damage and mold growth is visually assessed and the affected building materials are identified. The visual inspection includes observations of hidden areas where damages may be present, such as crawl spaces and behind wallboard.

Remediation

Once mold is identified, the goal is to remediate. Remediation is to remove or clean mold damaged materials to control the dispersal of the mold. In all situations, the underlying moisture problem must be corrected to prevent recurring mold growth. Indoor moisture can result from numerous causes, such as: facade and roof leaks; plumbing leaks; floods; condensation; and high relative humidity.

Relative humidity should be generally maintained at levels below 60% to inhibit mold growth. Short-term periods of higher humidity would not be expected to result in mold growth. However, condensation on cold surfaces could result in water accumulation at much lower relative humidity levels. Relative humidity should be kept low enough to prevent condensation.

Non-porous materials (e.g. metals, glass, and hard plastics) with mold growth can usually be cleaned. Semi-porous structural materials (e.g. wood and concrete) can be cleaned if structurally sound. Porous materials (e.g. ceiling tiles, insulation, carpet, sheet rock) must be removed and discarded. Damp or wet materials must be dried within 48 hours (preferably

within 24 hours). Porous materials contaminated with sewage or overland flooding are always replaced. Mold growth should be removed from non-porous and semi-porous surfaces with a strong brush and non-ammonia containing detergent and thorough drying.

After completing mold remediation and correcting moisture problems, building materials that were removed will be replaced and brought to an intact and finished condition. New building materials that do not promote mold growth will also be used. Antimicrobial paints are usually unnecessary after proper mold remediation. They should not be used in lieu of mold removal and proper moisture control, but may be useful in areas that are reasonably expected to be subject to moisture.

Environmental Sampling

Environmental sampling is not recommended by industry standards or necessary to proceed with remediation of visually identified mold growth or water damaged materials. Decisions on appropriate remediation strategies should be made on the basis of a thorough visual inspection.

For additional information on mold remediation, refer to EPA's guide, "Mold Remediation in Schools and Commercial Buildings" and [EPA's website](#).

Integrated Pest Management Plan

Prince George's County Public Schools is committed to providing safe learning environments free from unwanted pests and rodents. As part of these efforts, we have operated under the guidance of an Integrated Pest Management (IPM) program since 1989. Developed by the U.S. Department of Agriculture, IPM calls for non-toxic methods of controlling pests and rodents, including improved sanitation and maintenance along with occupant education and involvement. Pest Control promotes a pest-free environment to school and office facilities through usage of environmentally safe and code approved products. Specific functions for Pest Control include:

- Facility Inspections
- Treatment of Facilities
- Removal of Pests and Small Animals
- Training

Chemical Management

PGCPS prioritizes staff safety by adhering to the OSHA Hazard Communication Standard (HCS). This federal standard requires that information about hazardous chemicals is properly identified and shared.

To meet this requirement, PGCPS ensures that for every hazardous chemical in a building:

1. A Safety Data Sheet (SDS) is prepared, which details the chemical's hazards and safe handling procedures.
2. The SDS is readily accessible to all employees in that building.

By providing this accessible documentation, we empower our staff with the necessary information to confidently and safely manage chemical materials, storage, and emergency procedures across all PGCPS-owned properties.

Anti-Idling

PGCPS recognizes that cars and buses that idle outside a school emit particulates that cause air pollution and are respiratory irritants for students, staff and visitors. Vehicle exhaust close to the school building is likely to be pulled into the school through open doors or exterior ventilation systems. In addition to direct health impacts onsite, emissions from idling contribute to climate change.

It is best practice to limit school bus and vehicle idling to no more than 5 minutes per Maryland Transportation Code § 22-402.

Tobacco and Nicotine-Free Environment Policy

Every staff person, student, and visitor should have the right to breathe clean air in their school and work environment and that PGCPS is acutely aware of the serious health risks associated with the use of tobacco or nicotine products, both to users and non-users. The policy recognizes that the use or promotion of tobacco or nicotine products on school grounds and at off-campus school-sponsored events is detrimental to the health and safety of students, staff, and visitors. PGCPS acknowledges that adult staff and visitors serve as role models for students and embraces its obligation to promote positive role models in schools, and to provide an environment for learning and working that is safe, healthy, and free from unwanted smoke and tobacco or nicotine product use, including vaping, for students, staff, and visitors. Therefore, PGCPS prohibits tobacco or nicotine products on school property and in all public school facilities and vehicles per Board Policy 0129-Possession and Use of Alcohol, Tobacco, and Drugs on School Property.

Lead in Water

Prince George's County Public Schools (PGCPS) is committed to providing safe learning and working environments. For more than a decade, PGCPS has worked to provide students and staff with safe drinking water in compliance with U.S. Environmental Protection Agency mandates.

Our comprehensive efforts include:

- Proactive Testing: Since April 2017, PGCPS has conducted a system-wide Lead in Water Testing and Remediation initiative, testing all schools and office buildings.
- Immediate Action: Any fixture testing above the PGCPS action level of 5 parts per billion (ppb) was immediately taken out of service, and bottled water was provided when necessary.
- Completed Remediation: Since 2004, we have methodically addressed lead in water sources. The final phase, which included retesting all currently used drinking sources, was completed on January 30, 2018.
- Infrastructure Upgrade: We are installing filtered drinking fountains and ADA-compliant bottle-filling stations in all schools. This includes:
 - Filtered drinking fountains in multi-purpose rooms and gymnasiums.
 - One bottle-filling station per elementary school.
 - Two bottle-filling stations per middle and high school.

PGCPS will continue to aggressively monitor and maintain its facilities to ensure safe, clean drinking water for everyone.

Lead in Paint

Lead can be found in paint and varnishes in pre-1978 building structures. When lead is released as dust or chips, individuals are at risk of exposure via inhalation or ingestion. This can affect the nervous system, and young children under the age of six years old are particularly susceptible. Our Environmental office will test and remediate lead based paint per all applicable laws on an as needed basis.

Emergency Response

The Department of Building Services responds to disasters, including, but not limited to,

tornadoes, fires, earthquakes, hurricanes, and flooding. With a collaborative effort, staff demonstrate the ability to conduct a fast coordinated and sustained response to assess facilities for safety concerns, establish an action log of needs, and execute all work in a timely manner to ensure students and staff have a safe, clean, and functional facility.

Any IAQ concerns that could potentially pose a threat to the health and safety of building occupants shall be addressed by the Environmental Office immediately. Teachers, administrators, and custodial staff are encouraged to report such incidents as soon as possible.

Combustion Odor Complaints

Building occupants who smell combustion odors and/or experience severe headaches or nausea should report the incident to the main office or custodian. Staff members from the PGCPs Building Services Department will respond to the complaint promptly and investigate any probable cause of emissions.

Chemical Spills

If a major spill occurs (cannot be cleaned-up safely by yourself), contact the main office or custodian. In case of a spill that is an immediate hazard, know the school's emergency response plan and be ready to carry it out if necessary. In general, if evacuation is necessary, proceed as you would in a fire drill evacuation. Send everyone to a pre-designated area and then count heads to make sure everyone is out of the building.

Steps for Prevention

Preventative maintenance is the most effective way to ensure that IAQ concerns do not escalate into emergencies. PGCPs outlines all of the preventative maintenance performed in the Comprehensive Maintenance Plan found on the PGCPs Building Services website. PGCPs is committed to sustaining healthy indoor environmental quality in all of its facilities by:

- Ensuring proper ventilation, filtration, and temperature control to maintain healthy indoor air.
- Use safe preventative methods to manage pests and reduce pesticide exposure.
- Focus on identifying and eliminating moisture sources to prevent mold growth.

- Reduce or remove pollutants at the source to improve overall air quality
- Responding in a timely manner to Work Orders related to any of the IAQ topics outlined in this plan. Inspecting and performing annual HVAC maintenance per industry standard practices, original equipment manufacturers recommendations, and as outlined in ASHRAE guidance.
- Ensuring that there are abundant hand hygiene stations (e.g. sinks for handwashing) throughout school buildings with plenty of supplies on hand in all buildings.
- Regular daily cleaning by Custodial staff and disinfecting of high contact surfaces with a hospital grade EPA registered disinfectant as needed.

Preventative Maintenance and Repair of Buildings

Preventive maintenance plays a major role in maintaining the quality of indoor air by ensuring that building systems are operating effectively and efficiently. The building systems, which are operated and maintained by the Department of Building Services, are key components in maintaining comfortable temperatures and humidity levels in occupied spaces. Preventative maintenance involves routine inspection, adjustment, and repair of building structures and systems, including the heating, ventilation, and air conditioning system (HVAC), unit ventilators, local exhaust, and fresh air intakes.

Building inspections play a crucial role in proactively identifying IAQ problems that can significantly impact the health of staff and students. Routine maintenance and inspections are outlined in the PGCPs Comprehensive Maintenance Plan. All building repairs should be reported to by the School's Main Office or Custodian to Building Services via the work order system.

Ventilation and filtration systems help create optimal learning and working environments, as they impact thermal comfort, moisture levels, and indoor pollutant levels. Effective filtration systems capture particulate matter and allergens, mitigating the risk of respiratory issues and allergies. The PGCPs Comprehensive Maintenance Plan outlines preventative maintenance schedules.

Building Services will complete an annual review of the IAQ Management Plan in order to address frequent IAQ complaints, emerging IAQ issues, ongoing research regarding indoor environmental quality, updates to building and ventilation systems, and changes to applicable district, local, state, and federal requirements. Revisions to the IAQ Management Plan will allow PGCPs to provide the most recent and comprehensive guidance to school occupants in order to

maintain healthy and comfortable learning environments in all of its facilities.

Applicable Federal, State, and District Requirements or Guidance

Federal Guidance

40 CFR Part 50- National Ambient Air Quality Standards
 40 CFR Part 763 Subpart E- Asbestos-Containing Materials in Schools
 OSHA 1910.1450-Occupational exposure to hazardous chemicals in laboratories
 U.S. EPA-IAQ Tools for Schools Resources

State Guidance

ASHRAE Standards 90.1-2022-Energy Standard for Sites and Buildings
 ASHRAE Standards 62.1-2022-Ventilation and Acceptable Indoor Air Quality
 COMAR Title 26, Subtitle 11 (Air Quality Control)
 Maryland Clean Indoor Air Act
 Maryland Transportation Code § 22-402- Anti-Idling

District Policies and Procedures

The Environmental Office uses the following policies and procedures to guide its efforts in providing and maintaining a safe and healthy work and learning environment for staff and students.

Board Policy 0111-Sustainability
 Board Policy 0113-Service Animals
 Board Policy 0116-Wellness, Nutrition, and Physical Activity
 Board Policy 0129-Possession and Use of Alcohol, Tobacco, and Drugs on School Property
 Board Policy 5163-Students with Asthma
 Administrative Procedure 0111- Reduction of Wasted Food
 Administrative Procedure 0416- MRSA Awareness, Prevention, and Treatment
 Administrative Procedure 2300-Tobacco Free School Environment
 Administrative Procedure 2803- Hazard Communication Program
 Administrative Procedure 2810- Recycling Program
 Administrative Procedure 2810.1- Breakfast in the Classroom Recycling
 Administrative Procedure 3522-Integrated Pest Management and Termite Control

Administrative Procedure 3523-Environmental Issues
Administrative Procedure 5167-Allergen Control in School
Administrative Procedure 6115 Emergency Procedures
Administrative Procedure 6131 Animals in the School Setting
Climate Change Action Plan