Written Indoor Air Quality Program

Egg Harbor Township
School District

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13 Swift Drive
Egg Harbor Township, NJ 08234

Revised 8/25/20

Policy and Administration

This notice is to inform employees that our agency complies with the Public Employees Occupational Safety and Health (PEOSH) Program, Indoor Air Quality (IAQ) Standard (N.J.A.C. 12:100-13)(2007), which was proposed on December 18, 2006 and adopted on May 21, 2007.

We recognize that good indoor air quality is essential to employee's health and productivity. We have established the following policies to promote good indoor air quality for employees in our buildings. These policies follow the requirements established by the PEOSH IAQ Standard as it applies to our workplace. This Written Indoor Air Quality Program applies to the following buildings/locations:

1. **Egg Harbor Twp. High School** 24 High School Drive, Egg Harbor Township, NJ 08234
2. **Fernwood Middle School** 4034 Fernwood Avenue, Egg Harbor Township, NJ 08234
3. **Alder Middle School** 25 Alder Avenue, Egg Harbor Township, NJ 08234
4. **Miller Elementary School** 2 Alder Avenue, Egg Harbor Township, NJ 08234
5. **Davenport Elementary School** 2301 Spruce Avenue, Egg Harbor Township, NJ 08234
6. **Davenport Primary School** 2499 Spruce Avenue, Egg Harbor Township, NJ 08234
7. **Slaybaugh Elementary School** 11 Swift Drive, Egg Harbor Township, NJ 08234
8. **Slaybaugh Primary School** 13 Swift Drive, Egg Harbor Township, NJ 08234
9. **Swift Elementary School** 5 Swift Drive, Egg Harbor Township, NJ 08234
10. **Eagle Academy** 3517 Bargaintown Road, Egg Harbor Township, NJ 08234

Designated Person

As required by the New Jersey PEOSH Indoor Air Quality Standard, a person has been designated as the person responsible for Egg Harbor Township School District's compliance with the standard. This person is the Director of Facilities, **Mr. Timothy Brunetta, CEFM**, who can be reached at **(609) 927-8222 Ext. 1800**.

The designated person is the person who has been trained and given the responsibility by the Egg Harbor Township School District to make routine visual inspections, oversee preventive maintenance programs, and maintain required records in order to ensure compliance with the IAQ Standard. The designated person is also assigned to receive employee concerns/ complaints about indoor air quality, conduct investigations, facilitate repairs or further investigation as necessary, maintain required records, and update the written program annually.

Preventive Maintenance Schedule

Preventive maintenance schedules that follow manufacturers' specifications are in place for heating, ventilation and air conditioning systems (HVAC) systems in this workplace. A copy of the preventive maintenance schedule is attached. Damaged and inoperable components will be repaired or replaced as appropriate and a work order to show actions taken will be completed.

Recordkeeping

Documentation of preventive maintenance and repairs to the ventilation system(s) are retained for at least 3 years and include the following information:

- Date that preventive maintenance or repair(s) were performed
- Person or company performing the work
- Documentation of:
    - Checking and/or changing air filters
    - Checking and/or changing belts
    - Lubrication of equipment parts
    - Checking the functioning of motors
    - Confirming that equipment is in operating order
    - Checking for microbial growth in condensate pans or standing water

Documentation of preventive maintenance and work orders for repairs are maintained by Timothy Brunetta.

Indoor Air Quality Compliance Documents

Our agency will make reasonable efforts to obtain and maintain copies of IAQ compliance documents. Available IAQ compliance documents will be maintained by the Designated Person and will be available to PEOSH during an inspection. These documents include:

1. As-Built construction documents
2. HVAC system commissioning reports
3. HVAC systems testing, adjusting, and balancing reports
4. Operations and maintenance manuals
5. Water treatment logs
6. Operator training materials

Investigating Complaints

If employees begin to experience health symptoms that they believe are related to poor indoor air quality, they should notify the Designated Person so that their concerns can be investigated.

The Designated Person has been trained and given the authority to conduct basic indoor air quality complaint investigations. In many cases IAQ complaints can be resolved by the Designated Person.

Responding to Signed Employee Complaints to PEOSH

If the District receives a written notification from PEOSH that a signed employee complaint has been filed with PEOSH, an inquiry shall be conducted into the allegations. The findings of the initial inquiry and any planned actions will be provided in a written response to PEOSH within fifteen (15) working days of receipt. Copies of all responses to PEOSH will be maintained by the Designated Person.

Notification of Employees

The Designated Person will notify employees at least 24 hours in advance, or promptly in emergency situations, of work to be performed on a building that may introduce air contaminants into their work area. This notification will be in writing and will identify the planned project and the start date. The notification will also include information on how to access Material Safety Data Sheets (MSDS) or other hazard information. The Designated Person will maintain records of this notification for compliance recordkeeping purposes.

Controlling Microbial Contamination

Uncontrolled water intrusion into buildings (roof leaks, flooding, pipe condensation, plumbing leaks, or sewer backups) has the potential to support microbial growth. All employees should routinely observe their workplace for evidence of water intrusion (i.e. roof leaks, pipe leaks). Employees should notify the Designated Person immediately if they observe evidence of water intrusion so that corrective action can be taken. Ceiling tiles, carpet, and wall boards not dried within 48 hours may be removed as directed by the Designated Person. (See Appendix A for additional information.)

Controlling Air Contaminants

<u>Outside air</u>

The Designated Person will identify the location of outside air intakes and identify potential contamination sources nearby, such as loading docks or other areas where vehicles idle, nearby exhaust stacks, or vegetation. Periodic inspections will be conducted to ensure that the intakes remain clear of potential contaminants. If contamination occurs, the Designated Person will eliminate the contaminant source or make arrangements to relocate the intake.

<u>Point Source Contaminants</u>

The Designated Person will identify point sources of contaminants and arrange to capture and exhaust these sources from the building using local exhaust ventilation. Exhaust fans will be periodically inspected to ensure that they are functioning properly and exhausting to areas located away from outside air intakes.

Response to Temperature and Carbon Dioxide

Temperature

Where a mechanical ventilation system capable of regulating temperature is present, facilities personnel strive to maintain office building temperatures within the range of 68 to 79 degrees Fahrenheit. If outside this range, the Designated Person should be contacted. The Designated Person will ascertain whether the HVAC system is operating properly. If not, the system must be repaired. The IAQ Standard does not require the installation of new HVAC equipment to achieve this temperature range.

Carbon Dioxide

If the room is equipped with non-mechanical ventilation systems such as operable windows, stacks, louvers, the Designated Person should ensure that these areas are clear and operable to allow the flow of air. If carbon dioxide (CO_2) concentrations exceed 1,000 parts per million (ppm), and the room is not equipped with operable windows, the Designated Person will conduct an inspection to ensure that the mechanical HVAC system is operating properly.

Maintaining Indoor Air Quality During Renovation and Construction Projects

Renovation work and/or new construction projects that have the potential to result in the diffusion of dust, stone and other small particles, toxic gases or other potentially harmful substances into occupied areas in quantities hazardous to health will be controlled in order to minimize employee exposure. The Designated Person will utilize the following protocol to assure that employees' exposure to potentially harmful substances is minimized:

- Obtain MSDS for all products to be utilized on the project and maintain on-site throughout the duration of the project.
- Choose the least toxic product that is technically and economically feasible.
- Consider performing the renovation/construction project when building is least occupied.
- Consider temporarily relocating employees to an alternate worksite.
- Notify potentially affected employees, in writing, at least 24 hours prior to commencement of chemical use or dust generation.
- Isolate the work area from occupied areas.
- Use mechanical ventilation and local exhaust ventilation to maintain a negative pressure gradient between the work area and occupied areas.

Before selection and use of paints, adhesives, sealants, solvents or installation of insulation, particle board, plywood, floor coverings, carpet backing, textiles, or other materials in the course of renovation or construction, the designated person will check product labels or seek and obtain information from the manufacturer of those products on whether or not they contain volatile organic compounds such as solvents, formaldehyde or isocyanides that could be emitted during regular use. This information should be used to select the least volatile/hazardous products and to determine if additional necessary measures need to be taken to comply with the objectives of this section. The Designated Person will maintain records of this evaluation for compliance recordkeeping purposes.

Management and the Designated Person will consider the feasibility of conducting renovation/construction work using appropriate barriers, during periods when a building is unoccupied, or temporarily relocating potentially affected employees to areas of the building that will not be impacted by the project.

Temporary barriers will be utilized to provide a physical isolation between the construction area and occupied areas of the building.

Mechanical ventilation (i.e. fans, portable blowers, or existing HVAC equipment) will be used to maintain a negative pressure gradient between the work area and occupied areas to ensure the safety of employees. Renovation areas in occupied buildings will be isolated and dust and debris shall be confined to the renovation or construction area.

If work is being performed by an outside contractor, the Designated Person will maintain communication with contractor personnel to ensure they comply with the requirements of the PEOSH IAQ standard.

Employees who have special concerns about potential exposures during or after renovation/construction/repair work should consult with their supervisor. If despite these preventive actions, employees are exposed to air contaminants resulting in health effects, employees will be instructed to report any work-related health symptoms to one person (e.g., the nurse, human resources, designated person) so that they can be accurately assessed and investigated when indicated. All exposures should also be reported to their supervisor and the designated person.

Obtaining Permits and Performing Work in Accordance with the New Jersey Uniform Construction Code (N.J.A.C. 5:23)

Permits for renovation and construction-related work will be obtained as required by the New Jersey Uniform Construction Code (NJUCC), (N.J.A.C. 5:23). All work requiring a permit will be performed in compliance with N.J.A.C. 5:23. Additional information concerning the NJUCC can be obtained from the NJ Department of Community Affairs, Division of Codes and Standards (www.state.nj.us/dca/codes, 609-984-7609)

Maintaining Natural Ventilation in Buildings without Mechanical Ventilation

In buildings not equipped with mechanical ventilation, the Designated Person will identify the location of non-mechanical ventilation systems, such as stacks and operable windows. Periodic inspections will be conducted to ensure that these systems are operable and the surrounding areas remain clear of obstructions and potential contaminants.

Employee Responsibilities

Employees have a role in maintaining good indoor air quality within their workplace. Employees should ensure that they do not introduce unauthorized chemicals (i.e. fragrances, air fresheners, cleaning solvents, ozone generators) into the workplace. In addition, if employees observe situations which may lead to poor indoor air quality (i.e. inoperable windows, water leaks, or visible mold) they should notify Timothy Brunetta at (609) 927-8222 Ext. 1800 of the situation so that it can be addressed promptly.

Employees are responsible for maintaining mechanical and passive ventilation systems by ensuring that louvers and diffusers remain clear to allow the free flow of air. Intentionally blocking, diverting, or otherwise manipulating components (i.e. thermostat,) of the ventilation system may result in disruption of the ventilation system in the immediate area or other occupied areas of the building.

Periodic Review and Update

The Written Indoor Air Quality Program will be updated at least annually to reflect changes in policies, procedures, responsibilities, and contact information. This plan will be reviewed prior to December 5, 2021.

Certification:

Timothy Brunetta, CEFM Designated Person	8/12/19

Appendix A

Controlling Microbial Contamination

Introduction

Concern about indoor exposure to mold has increased as the public has become more aware that such exposure can cause a variety of health effects and symptoms, including allergic reactions. This document presents guidelines for the remediation/clean-up of mold and moisture problems in Egg Harbor Township Schools. It contains measures designed to protect the health of building occupants and remediators.

Using this document, individuals with little or no experience with mold remediation should be able to make a reasonable judgment as to whether the situation can be handled in-house.

Molds can be found almost anywhere; they can grow on virtually any organic substance, so long as moisture and oxygen are present. There are molds that can grow on wood, paper, carpet, foods, and insulation. When excessive moisture (above 60%) accumulates in buildings or on building materials, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed. **It is impossible to eliminate all mold and mold spores in the indoor environment. However, mold growth can be controlled indoors by controlling moisture indoors.**

Molds reproduce by making spores that usually cannot be seen without magnification. Mold spores waft through the indoor and outdoor air continually. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. Molds gradually destroy the things they grow on.

Many types of molds exist. **All molds have the potential to cause health effects.** Potential health concerns are an important reason to prevent mold growth and to remediate/clean up any existing indoor mold growth.

Since mold requires water to grow, it is important to prevent moisture problems in buildings. Moisture problems can have many causes, including:

- Roof/Window Leaks
- Pipe Leaks
- HVAC Condensate Pan Overflow
- HVAC Scheduling & Short Cycling
- Custodial Floor Care Operations

Some moisture problems in buildings have been linked to changes in building construction practices during the 1970s, 80s and 90s. Some of these changes have

resulted in buildings that are tightly sealed, but may lack adequate ventilation, potentially leading to moisture buildup.

When mold growth occurs in buildings, adverse health problems may be reported by some building occupants, particularly those with allergies or respiratory problems. Remediators should avoid exposing themselves and others to mold-laden dusts as they conduct their cleanup activities. Caution should be used to prevent mold and mold spores from being dispersed throughout the air where they can be inhaled by building occupants.

(Note: It is important to understand that there are no Federal or State regulations that define acceptable levels of mold.)

Prevention

The key to mold control is moisture control. In-house EHT Facilities personnel should strive to:

• Conduct routine visual inspections throughout their buildings, paying specific attention to areas known to have moisture problems.

• Fix roof, window and plumbing leaks in the building envelope as soon as possible.

• Watch for condensation and wet spots. Fix source(s) of moisture problem(s) as soon as possible (best practice within 48 hours).

• Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid).

• Keep heating, ventilation and air conditioning (HVAC) drip pans clean, flowing properly and unobstructed.

• Vent moisture-generating appliances, such as dryers, to the outside where possible.

• Maintain low indoor humidity, below 60% relative humidity (RH), ideally 30-50%, if possible.

• Perform regular building/HVAC inspections and maintenance as scheduled.

• Clean and dry wet or damp spots within 48 hours.

• Don't let foundations stay wet. Provide drainage and slope the ground away from the foundation.

Step-by-Step Reporting/Response

When, despite routine prevention efforts, evidence is found suggesting the presence of mold (ie. water intrusion, musty odor, visible growth, etc.) the following protocol should be employed.

Reporting:

1. **Notify Facilities personnel immediately.** A work order should be entered to document the complaint/issue; however personally speaking with your building Custodian and/or Maintenance Technician is critical for a rapid response.

    a. Be sure to report/document exactly the problem or concern, by including the physical evidence of the problem (ie. wet ceiling tile), and/or physical/health related symptoms of staff or students that may be the result of suspected increased mold spore levels.

    b. Report of a suspected problem may be made by any building occupant, and all complaints shall be taken seriously and investigated thoroughly.

Response:

1. **Investigate the complaint.** After receiving a complaint of water intrusion and/or the possibility of the presence of mold growth, Facilities personnel should gather as much detailed information as possible to allow for a focused investigation. Every situation is different, and having good information will allow for a more targeted investigation and rapid response.

2. **When the problem is obvious.** When the source of the water/moisture issue is obvious, such as a wet ceiling tile, the tile should be removed and discarded. A visual inspection should then be made above the drop ceiling plane to determine the source of the water.

    Maintenance personnel should remediate (or have remediated via contractor) any mechanical or structural problem. Once this has occurred, the area should be allowed to dry completely. This may include physically drying metal or masonry components, or increasing air circulation for items such as insulation.

After drying has taken place, a careful visual inspection should be conducted to look for any evidence of mold growth. If no evidence can be identified, as a precautionary measure to prevent possible future growth, the area shall be misted with a biocide (ie. Mold Zapper) and allowed to dry fully. A new ceiling tile should then be installed and its condition monitored.

(Note: It should be noted that any mold spore, live or dead, has the potential to cause negative health effects in persons sensitive to such allergens. By using a biocide in this process, we seek to kill the always present spores to prevent any possible future reproduction should the environment become suitable.)

If evidence is found of minor growth, a closer inspection is necessary. Using the example of impacted pipe insulation, the first step would be to determine if the insulation contains asbestos. Maintenance personnel should review their building's AHERA documentation for such record. Should the mold impacted material contain asbestos, a remediation contractor shall be brought in to remove the material. (AHERA records should be updated to reflect such removal.) Should the insulation not contain asbestos, Maintenance personnel should carefully open the insulation to determine if the mold growth is surface only or has propagated throughout the material.

In the event the mold growth has only impacted the surface or paper covering, assuming the water source has been eliminated and thorough drying has concluded, the surface should be misted with a biocide for the reasons stated above. In the event the mold growth has worked its way into the insulation, the affected area should be removed and replaced. As spores will certainly be disturbed during this process, the area should be misted with a biocide as a precautionary measure.

3. **When the problem isn't obvious.** When building occupants are suffering from symptoms consistent with exposure to elevated levels of mold spores, and an investigation fails to uncover a moisture issue or mold growth evidence, air samples will be taken to confirm or rule out the presence of excessive mold spores.

   Should this testing disprove the presence of high level(s) of mold spores, Facilities personnel will continue to monitor the area(s). Should test results show the area(s) contain high spore counts, an environmental consultant shall be brought in to provide advice on prevention and cleaning.

   (Note: The examples listed above are common situations and have been included to illustrate basic response protocols. However, each potential mold investigation is unique and the specific information gathered will dictate the proper response for that instance.)

Considerations

It is important to understand that not all affected surfaces should be treated the same with regard to cleaning.

Hard Surfaces: When mold growth is found on a hard surface (ie. block wall, tile, metal door frames, drywall or plaster), the area should first be misted with a biocide to kill any live mold spores. This should be followed up with a damp mild detergent wipe to physically remove the spores from the area. It is important that a "damp" wipe be used during this process, to minimize the introduction of water onto the surface.

Porous Surfaces: When mold growth is found on porous surfaces (ie. paper, cardboard, wood, or unpainted block), the area should be misted with a biocide to kill any live spores. If impractical to damp wipe (ie. paper), the biocide should be left to dry. If available, a HEPA vacuum should be used to physically remove the dead spores after drying. If the surface can be damp wiped (ie. wood), it should be done so as with hard surface cleaning. Any paper materials should be carefully bagged and discarded.

Moderate and Major Growth: When, after an investigation, it is determined that a moderate or major mold growth event has occurred (usually defined as impacting an area greater than 10 SF), an environmental consultant contractor shall be brought in to assess and provide direction on remediation and testing.

In the loop. Throughout the investigation and remediation processes, the complainant and the Building Administrator shall be kept abreast of all developments and activities. Facilities personnel shall ensure that all findings and activities are documented in the respective work order.

Tools of the Trade

As remediation efforts may expose in-house workers to increased levels of mold spore(s), all Facilities personnel shall have adequate access to the following PPE / Equipment:

1) Dust Mask (N-95 Disposable or Greater)
2) Rubber Gloves
3) High Power Flashlight
4) Floor Fan / Dehumidifier
5) Moisture Meter
6) Humidity Gage
7) HEPA Vacuum
8) Trash Bags (Material Removal)