

Written Indoor Air Quality Program

Prepared For:

XXXXXXXX

Address
, NJ

JANUARY 2013

**WRITTEN INDOOR AIR QUALITY PROGRAM
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Policy and Administration

This written Indoor Air Quality Program 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. **Appendix A** presents a list of definitions that may be utilized with this program. This Written Indoor Air Quality Program applies to the following building:

Building:

Address:

Basic Building Description:

Designated Person

As required by the New Jersey PEOSH Indoor Air Quality Standard, a person has been designated as the person responsible for compliance with the IAQ standard for the Boro of xxxxxxx. This Designated Person is:

Name:

Address: **Phone:** (732)

The designated person is the person who has been trained and given the responsibility by the Boro of xxxxxxx to make routine visual inspections (see **Appendix B** criteria for Building System Evaluations), oversee preventive maintenance programs and maintain required records in order to ensure compliance with the IAQ Standard. The designated person or his designee is also assigned to receive employee concerns/complaints about indoor air quality, conduct investigations, facilitate repairs as necessary, maintain required records, and update the written program annually.

The following individuals are responsible to assist the Designated Person with the noted portions of the plan:

- IAQ concerns /complaints receipt and follow-up:

Name: _____ **Phone:** (732)

- IAQ Work orders and documents:

Name: _____ **Phone:** (732)

- Preventive Maintenance and Documentation (Supervisor in charge of building):

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 (**Appendix C**). Damaged and inoperable components will be

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repaired or replaced as required; a work order to show actions taken will be completed and attached to the "Indoor Air Quality Issue Resolution & Deferred Maintenance Table (**Appendix F**).

Recordkeeping

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

- Date that preventive maintenance or repair was 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
 - NJ Right – to Know Central File (MSDS Location)

Documentation of preventive maintenance and work orders will be maintained by the Buildings and Grounds Representative, xxxxxxxxxxxxxxxxxxxxxxxx. A copy of all documentation of preventative maintenance and work orders performed by the building maintenance staff will be maintained by the building supervisor at xxxxxxxxxxxxxxxx.

Indoor Air Quality Compliance Documents

Boro of xxxxxxxx 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 may include:

(Please circle the appropriate answer)

- | | |
|---|------------|
| 1. As-built construction documents (if available) | Yes |
| 2. HVAC system commissioning reports (if applicable) | No |
| 3. HVAC systems testing, adjusting, and balancing reports (if applicable) | No |
| 4. Operations and maintenance manuals | Yes |
| 5. Water treatment logs (if applicable) | Yes |
| 6. Operator training materials | No |

The compliance documents are located at:

As-built construction documents	Some
---------------------------------	------

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HVAC system commissioning reports	No
HVAC systems testing, adjusting, and balancing reports	No
Operations and maintenance manual	Some
Water treatment logs	Yes
Operator training materials	No

Investigating Complaints

If employees begin to experience health symptoms that they believe are related to poor indoor air quality, they should notify the building supervisor at (732)_____ or the safety coordinator at (732)_____ to obtain an IAQ Concern Form (**Appendix D**) or Indoor Air Questionnaire (**Appendix E**). The IAQ Concern form is to be completed if the concern relates to temperature and the Indoor Air Questionnaire is to be completed for all other IAQ concerns. The questionnaire needs to be completed over 5 business days and forwarded to the safety office for review and investigation

The Designated Person and his designees have 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. If necessary, the Designated Person may contact an environmental consultant, health and safety specialist or HVAC contractor to help identify and correct the IAQ issue. Based upon the nature of the issues, one or more of the following forms may be utilized: Appendix D Indoor Air Quality Concern Form, Appendix E Indoor Air Questionnaire, Appendix F Indoor Air Quality Issue Resolution and Deferred Maintenance Tables and Appendix G Pollutant and Source Inventory.

Responding to Signed Employee Complaints to PEOSH

If the Boro of xxxxxxxx receives a written notification from PEOSH that a signed employee complaint has been filed with PEOSH, we will conduct an inquiry into the allegations (**Appendix E**). 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. Documentation of all complaints and responses will be maintained by the Boro of xxxxxxxx Safety Coordinator.

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 (**Appendix I**). This notification will be in writing and will identify the planned project, start and expected end date. Copies of the IAQ Notice and Material Safety Data Sheets will be provided to the Safety Office 48 hours in advance or immediately in emergency situations. The IAQ Notice will also include information on how to access Material Safety Data Sheets (MSDS) or other hazard

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information from the designated person and the Safety Coordinator. 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, sewer backups, etc.) has the potential to support microbial growth. All employees should routinely observe their workplace for evidence of water intrusion. Employees should notify the building supervisor or 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/or designee.

Controlling Air Contaminants

Outside Air

The building supervisor will identify the location of outside air intakes and identify potential contamination sources nearby, such as; loading docks, other areas where vehicles idle, nearby exhaust stacks, vegetation, smoking areas, waste storage, and high traffic areas. 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.

Point Source Contaminants

The building supervisor 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 will strive to maintain office building temperatures within the range of 68 to 79 degrees Fahrenheit. If outside this range, the building supervisor should be contacted. The designated person or the HVAC Supervisor 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, windows that operate and fans may be utilized when necessary.

Carbon Dioxide

If the room is equipped with non-mechanical ventilation systems such as operable windows, stacks, louvers, etc. the building supervisor or the HVAC department Supervisor should ensure that these areas are clear and operable to allow the flow of air. If carbon dioxide (CO₂) concentrations exceed 1,000 parts per million (ppm), and the room is not equipped with operable windows, the building supervisor or HVAC Supervisor 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 including painting that have the potential to result in the diffusion of dust, stone and other small particles, toxic gases and/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 the least occupied.
- Consider temporarily relocating employees to an alternate worksite.
- Notify potentially affected employees, in writing, a minimum of 24 hours prior to commencement of chemical use or dust generation.
- Isolate the work area from occupied areas utilizing separation and critical barriers
- Use temporary mechanical ventilation to maintain a negative pressure gradient between the work area and occupied areas if possible. If local ventilation must be used, the system should be cleaned before the area is re-occupied.

Planning for Air Quality During Renovation and Construction Projects

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 or his designee 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 isocyanates 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, the designated person and/or his designee should consider the feasibility of conducting renovation/construction work using appropriate barriers, during periods when the 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.

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Mechanical ventilation (i.e. fans, portable blowers, or existing HVAC equipment) should 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 or his designee should 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 feel that they have been exposed to air contaminants resulting in health effects, employees will be instructed to report any work-related health symptoms the Safety Coordinators office at (732) xxxxxx and complete the related workers comp paperwork.

Maintaining Natural Ventilation in Buildings without Mechanical Ventilation

In buildings not equipped with mechanical ventilation, the building supervisor 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. excessive personal fragrances, air fresheners, cleaning solvents, ozone generating air cleaners) into the workplace. In addition, if employees observe situations which may lead to poor indoor air quality (i.e. inoperable windows, water leaks, and visible mold) they should notify the Safety Coordinator at (732) xxxxxx so it may 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.

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APPENDIX A - Definitions

Definitions

ACGIH — American Conference of Governmental Industrial Hygienists.

ASHRAE — American Society of Heating, Refrigerating, and Air-Conditioning Engineers.

ASTM — American Society for Testing and Materials.

Air Cleaning — An IAQ control strategy to remove various airborne particulates and/or gases from the air. The three types of air cleaning most commonly used are particulate filtration, electrostatic precipitation, and gas sorption.

Air Exchange Rate — Used in two ways:

- 1) the number of times that the outdoor air replaces the volume of air in a building per unit time, typically expressed as air changes per hour;
- 2) the number of times that the ventilation system replaces the air within a room or area within the building.

Antimicrobial — Agent that kills microbial growth. See “disinfectant,” “sanitizer,” and “sterilizer.”

BRI — See “Building-Related Illness.”

Biological Contaminants — Agents derived from or that are living organisms (e.g., viruses, bacteria, fungi, and mammal and bird antigens) that can be inhaled and can cause many types of health effects including allergic reactions, respiratory disorders, hypersensitivity diseases, and infectious diseases. Also referred to as “microbiologicals” or “microbials.”

Breathing Zone — Area of a room in which occupants breathe as they stand, sit, or lie down.

Building Envelope — Elements of the building, including all external building materials, windows, and walls, that enclose the internal space.

Building-Related Illness — Diagnosable illness whose symptoms can be identified and whose cause can be directly attributed to airborne building pollutants (e.g., Legionnaire’s disease, hypersensitivity pneumonitis).

CFM — Cubic feet per minute.

CO — Carbon monoxide.

CO₂ — Carbon dioxide.

Ceiling Plenum — Space below the flooring and above the suspended ceiling that accommodates the mechanical and electrical equipment and that is used as part of the air distribution system. The space is kept under negative pressure.

Commissioning — Start-up of a building that includes testing and adjusting HVAC, electrical, plumbing, and other systems to assure proper functioning and adherence to design criteria. Commissioning also includes the instruction of building representatives in the use of the building systems.

Conditioned Air — Air that has been heated, cooled, humidified, or dehumidified to maintain an interior space within the “comfort zone.” (Sometimes referred to as “tempered” air.)

Constant Air Volume Systems — Air handling system that provides a constant air flow while varying the temperature to meet heating and cooling needs.

Dampers — Controls that vary airflow through an air outlet, inlet, or duct. A damper position may be immovable, manually adjustable, or part of an automated control system.

Diffusers and Grilles — Components of the ventilation system that distribute and diffuse air to promote air circulation in the occupied space. Diffusers supply air and grilles return air.

Disinfectants — One of three groups of antimicrobials registered by EPA for public health uses. EPA considers an antimicrobial to be a disinfectant when it destroys or irreversibly inactivates infectious or other undesirable organisms, but not necessarily their spores. EPA registers three types of disinfectant products based upon submitted efficacy data: limited, general or broad spectrum, and hospital disinfectant.

EPA — United States Environmental Protection Agency.

ETS — Environmental tobacco smoke.

Environmental Agents — Conditions other than indoor air contaminants that cause stress, comfort, and/or health problems (e.g., humidity extremes, drafts, lack of air circulation, noise, and overcrowding).

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Ergonomics — Applied science that investigates the impact of people's physical environment on their health and comfort (e.g., determining the proper chair height for computer operators).

Exhaust Ventilation — Mechanical removal of air from a portion of a building (e.g., piece of equipment, room, or general area).

Gas Sorption — Devices used to reduce levels of airborne gaseous compounds by passing the air through materials that extract the gases. The performance of solid sorbents is dependent on the airflow rate, concentration of the pollutants, presence of other gases or vapors, and other factors.

HEPA — High efficiency particulate arrestance (filters).

HVAC — Heating, ventilation, and air conditioning system.

Hypersensitivity Diseases — Diseases characterized by allergic responses to animal antigens. The hypersensitivity diseases most clearly associated with indoor air quality are asthma, rhinitis, and hypersensitivity pneumonitis. Hypersensitivity pneumonitis is a rare but serious disease that involves progressive lung damage as long as there is exposure to the causative agent.

IAQ — Indoor air quality.

IPM — Integrated pest management.

Indicator Compounds — Chemical compounds, such as carbon dioxide, whose presence at certain concentrations may be used to estimate certain building conditions (e.g., airflow, presence of sources).

MCS — See "Multiple Chemical Sensitivity."

MSDS — Material Safety Data Sheet.

Make-up Air — Air brought into a building from the outdoors through the ventilation system that has not been previously circulated through the system.

Microbiologicals — See "Biological Contaminants."

Multiple Chemical Sensitivity — A term used by some people to refer to a condition in which a person is considered to be sensitive to a number of chemicals at very low concentrations. There are a number of views about the existence, potential causes, and possible remedial actions regarding this phenomenon.

NIOSH — National Institute for Occupational Safety and Health.

NTIS — National Technical Information Service.

Negative Pressure — Condition that exists when less air is supplied to a space than is exhausted from the space, so the air pressure within that space is less than that in surrounding areas.

OSHA — Occupational Safety and Health Administration.

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PELs — Permissible Exposure Limits (standards set by OSHA).

PM — Preventive Maintenance.

Plenum — Air compartment connected to a duct or ducts.

Positive Pressure — Condition that exists when more air is supplied to a space than is exhausted, so the air pressure within that space is greater than that in surrounding areas.

Psychosocial Factors — Psychological, organizational, and personal stressors that could produce symptoms similar to poor indoor air quality.

RELs — Recommended Exposure Limits (recommendations made by NIOSH).

Radiant Heat Transfer — Radiant heat transfer occurs when there is a large difference between the temperatures of two surfaces that are exposed to each other, but are not touching.

Re-entrainment — Situation that occurs when the air is being exhausted from a building is immediately brought back into the system through the air intake and other openings in the building envelope.

SBS — See "Sick Building Syndrome."

Sanitizer — One of three groups of antimicrobials registered by EPA for public health uses. EPA considers an antimicrobial to be a sanitizer when it reduces but does not necessarily eliminate all the microorganisms on a treated surface. To be a registered sanitizer, the test results for a product must show a reduction of at least 99.9% in the number of each test microorganism over the parallel control.

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Short-circuiting — Situation that occurs when the supply air flows to exhaust registers before entering the breathing zone. To avoid short-circuiting, the supply air must be delivered at a temperature and velocity that results in mixing throughout the space.

Sick Building Syndrome — Term sometimes used to describe situations in which building occupants experience acute health and/or comfort effects that appear to be linked to time spent in a particular building, but where no specific illness or cause can be identified. The complaints may be localized in a particular room or zone, or may be spread throughout the building.

Soil Gases — Gases that enter a building from the surrounding ground (e.g., radon, volatile organics, pesticides).

Stack Effect — Pressure-driven airflow produced by convection as heated air rises, creating a positive pressure area at the top of a building and a negative pressure area at the bottom of a building. The stack effect can overpower the mechanical system and disrupt ventilation and circulation in a building.

Static Pressure — Condition that exists when an equal amount of air is supplied to and exhausted from a space. At static pressure, equilibrium has been reached.

Sterilizer — One of three groups of antimicrobials registered by EPA for public health uses. EPA considers an antimicrobial to be a sterilizer when it destroys or eliminates all forms of bacteria, fungi, viruses, and their spores. Because spores are considered the most difficult form of a microorganism to destroy, EPA considers the term sporicide to be synonymous with “sterilizer.”

TLVs — Threshold Limit Values (guidelines recommended by ACGIH).

TVOCs — Total volatile organic compounds.

Tracer Gases — Compounds, such as sulfur hexafluoride, which are used to identify suspected pollutant pathways and to quantify ventilation rates. Tracer gases may be detected qualitatively by their odor or quantitatively by air monitoring equipment.

VAV — Variable air volume system.

VOCs — See “Volatile Organic Compounds.”

Variable Air Volume System — Air handling system that conditions the air to a constant temperature and varies the outside airflow to ensure thermal comfort.

Ventilation Air — Defined as the total air, which is a combination of the air brought into the system from the outdoors and the air that is being recirculated within the building. Sometimes, however, used in reference only to the air brought into the system from the outdoors.

Volatile Organic Compounds (VOCs) —

Compounds that evaporate from the many housekeeping, maintenance, and building products made with organic chemicals.

These compounds are released from products that are being used and that are in storage. In sufficient quantities, VOCs can cause eye, nose, and throat irritations, headaches, dizziness, visual disorders, memory impairment; some are known to cause cancer in animals; some are suspected of causing, or are known to cause, cancer in humans. At present, not much is known about what health effects occur at the levels of VOCs typically found in public and commercial buildings.

WHO — World Health Organization.

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APPENDIX B - Criteria for Building Systems Evaluations

Criteria for Building Systems Evaluations

In order to efficiently evaluate all aspects of the building's systems, to identify possible causes for complaints or malfunctions, the following is used to aid in a complete understanding of the conditions at any point in time.

The building systems evaluation includes checking the heating, ventilation, and air conditioning system for:

- obstructions at air intakes;
- pollutant sources by air intake;
- fresh air intakes work properly;
- air filters inspected for proper installation and cleanliness;
- condensate drain pans empty and clean;
- heating and cooling coils clean;
- air handling and duct work clean;
- mechanical rooms free of trash, debris, and stored chemicals;
- control systems operating properly;
- proper direction of air flow;
- air distribution;
- all exhaust fans operating and effectively removing pollutants; and
- outdoor air volume meets design specifications.

The building systems evaluation includes checking rooms for:

- overall cleanliness of rooms and occupied spaces;
- inspect plumbing for dry drain traps and possible leaks;
- condensation;
- functional local exhaust;
- proper air flow into room; and
- proper use and storage of chemical supplies.

The building systems evaluation includes checking maintenance operations for:

- proper use of chemicals;
- the availability of the Material Safety Data Sheets (MSDS);
- proper labeling of chemical containers, including cleaning supplies;
- presence and cleanliness of floor mats (may need mats for slip hazard);
- proper dusting;
- effective floor maintenance procedures;
- absence of carpeting near water sources;
- drain traps;
- water leaks;
- condensation;
- proximity of pollutant sources to the heating ventilation and air conditioning (HVAC) systems; and
- proper exhausting of combustion devices.

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APPENDIX C - Preventive Maintenance Schedule

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Example of Preventive Maintenance Schedule

	Every 3 Months	Every 6 Months	Annually	Every 2 Years	As Needed
HVAC System					
Filters Replaced/Fitted Properly					xx/xx/xx
Fan / Air Flow Direction	xx/xx/xx				
Belt Tension			xx/xx/xx		
Drain Pans Empty/Clean	xx/xx/xx				
Overall Cleanliness of Ducts and Unit			xx/xx/xx		
15-20 percent of Air Delivered is Fresh				xx/xx/xx	
Calibration of System				xx/xx/xx	
Thermostats Functional	xx/xx/xx				
CLEANING SCHEDULE					
Cleaning of Heating Coils			xx/xx/xx		
Cleaning of Cooling Coils		xx/xx/xx			
Cleaning of Drainage Areas		xx/xx/xx			
Cleaning of Ductwork					xx/xx/xx
AIR INTAKE					
No Obstruction	xx/xx/xx				
Air Flows into duct	xx/xx/xx				
No Pollutant Sources Nearby (garbage, idling vehicles, exhaust)	X				
Dampers Operational	xx/xx/xx				
Motors Operational	xx/xx/xx				
LOCAL EXHAUST SYSTEMS					
Proper Exhaust Volume			xx/xx/x		
Air Direction Correct			xx/xx/x		
Fan Functional			xx/xx/x		
Outdoor Vent Checked / Cleaned			xx/xx/x		
OTHER					
Sewage Traps Filled with Water Weekly	xx/xx/xx				
Hazardous Chemicals Storage		xx/xx/x			
Walk-off Mat Cleanliness	xx/xx/xx				
Carpet Cleanliness	xx/xx/xx				
Leaks, Stains, Moisture Inspection	xx/xx/xx				
Clean All Tables, Diffusers, Shelves	xx/xx/xx				xx/xx/xx
Deep Clean Carpets, Strip and Wax Floors		xx/xx/xx			xx/xx/xx

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Preventive Maintenance Schedule

Building:	Every 3 Months	Every 6 Months	Annually	Every 2 Years	As Needed
HVAC System					
Filters Replaced/Fitted Properly					
Fan / Air Flow Direction					
Belt Tension					
Drain Pans Empty/Clean					
Overall Cleanliness of Ducts and Unit					
15-20 percent of Air Delivered is Fresh					
Calibration of System					
Thermostats Functional					
CLEANING SCHEDULE					
Cleaning of Heating Coils					
Cleaning of Cooling Coils					
Cleaning of Drainage Areas					
Cleaning of Ductwork					
AIR INTAKE					
No Obstruction					
Air Flows into duct					
No Pollutant Sources Nearby (garbage, idling vehicles, exhaust)					
Dampers Operational					
Motors Operational					
LOCAL EXHAUST SYSTEMS					
Proper Exhaust Volume					
Air Direction Correct					
Fan Functional					
Outdoor Vent Checked / Cleaned					
OTHER					
Sewage Traps Filled with Water Weekly					
Hazardous Chemicals Storage					
Walk-off Mat Cleanliness					
Carpet Cleanliness					
Leaks, Stains, Moisture Inspection					
Clean All Tables, Diffusers, Shelves					
Deep Clean Carpets, Strip and Wax Floors					

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APPENDIX D - Indoor Air Quality Concern Form

Indoor Air Quality Concern Form

OFFICE USE ONLY		
File Number: _____	Received By: _____	Date Received: _____

This form should be filled out by the building occupant or by a member of the building staff.

Occupant Name: _____ Date: _____

Building/Address: _____

Department/Location in Building: _____ Phone: _____

Completed by: _____ Title: _____ Phone: _____

This form should be used if your indoor air quality concern is related to temperature control and ventilation. Your observations can help to resolve the problem as quickly as possible. Please use the space below to describe the nature of the complaint and any potential causes.

WHEN COMPLETED PLEASE FORWARD TO:

**BORO OF XXXXX SAFETY COORDINATOR
 STREET/AVE
 , NJ**

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APPENDIX E - Indoor Air Questionnaire

Indoor Air Quality Questionnaire

OFFICE USE ONLY
 File Number: _____ Received By: _____ Date Received: _____

This form should be used if your indoor air quality concerns are related to ventilation and air pollutants,. Your observations can help to resolve the problem as quickly as possible. Please complete the questions below to assist in identifying the potential cause for your concern. *This form should be filled out by the building occupant.*

Anonymous filings will not be addressed as it complicates the investigation and its resolution. It will be necessary to interview the concerned party to assist in the IAQ investigation to resolve the concern as quickly as possible..

Occupant Name: _____ **Date:** _____
Building/Address: _____
Department _____ **Title:** _____
Location in Building: _____ **Phone:** _____

1. Area or room where you spend the most time in the building: _____

2. Do any of your work activities produce dust or odor? Yes No

If Yes, please describe: _____

3. Gender: Male Female
 Age Under 25 25-34 35-44 45-54 55 and over

4. Do you:

Smoke?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Have hay fever or pollen allergies?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Have skin allergies or dermatitis?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Have a cold or the flu?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Have sinus problems?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Have other allergies?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Wear contact lenses?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Operate video display terminals?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Operate photocopiers 10% or more of the time?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Use other special office machines?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, specify: _____		
Currently taking any medications?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, specify: _____		

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5. Office Characteristics:

_____ Number of persons sharing the same room/work area

_____ Number of windows in the room/work area

Do the windows open? Yes No

Please rate the adequacy of work space per person:

Poor		Average		Excellent
1	2	3	4	5

Please rate the room temperature:

Poor		Average		Excellent
1	2	3	4	5

6. How long have you worked: _____ in this room/area? _____ in this building?

7. Symptoms: On the form below, please record each occasion when you experience a symptom of ill-health or discomfort that you think may be linked to an environmental condition in this building. It is important that you record the time and date and your location within the building as accurately as possible, because that will help to identify conditions (e.g., equipment operation) that may be associated with your problem.

Also, please try to describe the severity of your symptoms (e.g., mild, severe) and their duration (the length of time that they persist). Any other observations that you think may help in identifying the cause of the problem should be noted. Feel free to attach additional pages or use more than one line for each event if you need more room to record your observations.

SYMPTOM	TIME/DATE	LOCATION	SEVERITY/DURATION	NOT RELATED TO BUILDING	APPEARED AFTER ARRIVAL	INCREASED AFTER ARRIVAL

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8. Have you seen a doctor for any of these symptoms?

Yes No

9. When do you experience relief from the symptoms:

10. Indicate which parts of the day, which days of the week, and the month and season during which your reported symptom(s) occur.

TIME OF DAY	MORNINGS			AFTERNOONS				EVENINGS				
DAY OF WEEK	Sun	Mon	Tues	Wed	Thurs	Fri	Sat					
MONTH	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
SEASON	Spring			Summer			Fall		Winter			

11. Do symptoms disappear?

Yes No

12. In your opinion, what is the cause of the perceived problems?

13. Comments: Please take this opportunity to comment on any factors you consider to be important concerning the quality of your work environment:

WHEN COMPLETED PLEASE FORWARD TO:

SAFETY COORDINATOR
STREET/AVE
, NJ

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APPENDIX F - Indoor Air Quality Issue Resolution and Deferred Maintenance Tables

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Date

APPENDIX G - Pollutant and Source Inventory

Municipality
 IAQ Plan
 Date

Pollutant and Source Inventory

Building Name: _____

Address: _____

Completed by: _____ Date: _____ File Number: _____

Using the list of potential source categories below, record any indications of contamination or suspected pollutants that may require further investigation or treatment. Sources of contamination may be constant or intermittent or may be linked to single, unrepeated events. For intermittent sources, try to indicate the time of peak activity or contaminant production, including correlations with weather (e.g., wind direction).

Source Category	Checked	Needs Attention	Location	Comments
SOURCES OUTSIDE BUILDING				
Contaminated Ambient Air				
Pollen, dust				
Industrial contaminants				
General vehicular contaminants				
Emissions from Nearby Sources				
Vehicle exhaust (parking areas, loading docks, roads)				
Dumpsters				
Re-entrained exhaust				
Contaminants near outside air intake				
Soil Gas				
Radon				
Leaking underground tanks				
Sewage smells				
Pesticides				

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 IAQ Plan
 Date

Pollutant and Source Inventory

Building Name: _____

Address: _____

Completed by: _____ Date: _____ File Number: _____

Using the list of potential source categories below, record any indications of contamination or suspected pollutants that may require further investigation or treatment. Sources of contamination may be constant or intermittent or may be linked to single, unrepeated events. For intermittent sources, try to indicate the time of peak activity or contaminant production, including correlations with weather (e.g., wind direction).

Source Category	Checked	Needs Attention	Location	Comments
Moisture or Standing Water				
Roof top				
Crawlspace				
Basement				
Office #				
Room #				
Equipment				
HVAC System Equipment				
Combustion gases				
Dust, dirt, or microbial growth in ducts				
Microbial growth in drip pans, chillers, humidifiers				
Leaks of treated boiler water				
Non HVAC System Equipment				
Office equipment				
Supplies for equipment				
Laboratory equipment				

Municipality
 IAQ Plan
 Date

Pollutant and Source Inventory

Building Name: _____

Address: _____

Completed by: _____ Date: _____ File Number: _____

Using the list of potential source categories below, record any indications of contamination or suspected pollutants that may require further investigation or treatment. Sources of contamination may be constant or intermittent or may be linked to single, unrepeated events. For intermittent sources, try to indicate the time of peak activity or contaminant production, including correlations with weather (e.g., wind direction).

Source Category	Checked	Needs Attention	Location	Comments
HUMAN ACTIVITIES				
Personal Activities				
Smoking				
Cosmetics (odors)				
Poor Hygiene (odors)				
Housekeeping Activities				
Cleaning materials				
Cleaning procedures (e.g., dust from sweeping, vacuuming)				
Stored supplies				
Stored refuse				
Maintenance Activities				
Use of materials with volatile compounds (e.g., paint, caulk, adhesives)				
Stored supplies with volatile compounds				
Use of pesticides				

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 IAQ Plan
 Date

Pollutant and Source Inventory

Building Name: _____

Address: _____

Completed by: _____ Date: _____ File Number: _____

Using the list of potential source categories below, record any indications of contamination or suspected pollutants that may require further investigation or treatment. Sources of contamination may be constant or intermittent or may be linked to single, unrepeated events. For intermittent sources, try to indicate the time of peak activity or contaminant production, including correlations with weather (e.g., wind direction).

Source Category	Checked	Needs Attention	Location	Comments
BUILDING COMPONENTS/FURNISHINGS				
Locations Associated with Dust or Fibers				
Dust-catching area (e.g., open shelving and electronics)				
Deteriorated furnishings				
Asbestos-containing materials				
Out of reach areas(light bars, top shelves, top of lockers)				
Unsanitary Conditions/Water Damage				
Microbial growth in or on soiled or water-damaged furnishings, ceiling tiles, under sinks, behind toilets and urinals				
Standing water				

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Pollutant and Source Inventory

Building Name: _____

Address: _____

Completed by: _____ Date: _____ File Number: _____

Using the list of potential source categories below, record any indications of contamination or suspected pollutants that may require further investigation or treatment. Sources of contamination may be constant or intermittent or may be linked to single, unrepeated events. For intermittent sources, try to indicate the time of peak activity or contaminant production, including correlations with weather (e.g., wind direction).

Source Category	Checked	Needs Attention	Location	Comments
Chemicals Released From Building Components or Furnishings				
Volatile compounds				
OTHER SOURCES				
Accidental Events				
Spills (e.g., water, chemicals, beverages)				
Water leaks or flooding				
Fire damage				

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 Date

Pollutant and Source Inventory

Building Name: _____

Address: _____

Completed by: _____ Date: _____ File Number: _____

Using the list of potential source categories below, record any indications of contamination or suspected pollutants that may require further investigation or treatment. Sources of contamination may be constant or intermittent or may be linked to single, unrepeated events. For intermittent sources, try to indicate the time of peak activity or contaminant production, including correlations with weather (e.g., wind direction).

Source Category	Checked	Needs Attention	Location	Comments
Special Use/Mixed Use Areas				
Designated Smoking areas				
Food preparation areas				
Underground or attached parking garages				
Laboratories				
Print shops, art rooms				
Exercise rooms				
Beauty salons				
Redecorating/Repair/Remodeling				
Emissions from new furnishings				
Dust, fibers from demolition				
Odors, volatile compounds				

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Pollutant and Source Inventory

Building Name: _____
 Address: _____
 Completed by: _____ Date: _____ File Number: _____

Using the list of potential source categories below, record any indications of contamination or suspected pollutants that may require further investigation or treatment. Sources of contamination may be constant or intermittent or may be linked to single, unrepeated events. For intermittent sources, try to indicate the time of peak activity or contaminant production, including correlations with weather (e.g., wind direction).

Source Category	Checked	Needs Attention	Location	Comments

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APPENDIX H - Employee Notification of Renovation Work

Boro of
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Date

NOTICE

In accordance with the requirements of the New Jersey Indoor Air Quality Standard, N.J.A.C. 12:100-13 2007, you are being notified that a construction/ renovation project will take place at _____, beginning on _____ through _____.

Material will be utilized that contain ingredients that may be potentially offensive or harmful to sensitive individuals. Efforts will be made to minimize employee exposure to these chemicals and other construction-related dusts and odors.

The Material Safety Data Sheets (MSDS) are available at the Safety Office.

If you should have any questions please contact the Safety Coordinator at (732) XXXX-XXXX.

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**APPENDIX I - Public Employer's Guide and Model Written Program
for The Indoor Air Quality Standard (N.J.A.C 12:100-13) (2007)**

**Boro of
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Date**

APPENDIX J - Building Floor Plan