Indoor Air Quality Plan

Policy and Administration
This notice is to inform employees that Ramapo College 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.

Ramapo College recognizes that good indoor air quality is essential to employee’s health and productivity. The College has established the following plan to promote good indoor air quality for employees in our buildings. This plan follows the requirements established by the PEOSH IAQ Standard as it applies to our workplace. This Indoor Air Quality Plan applies to all buildings on campus.

Designated Person
As required by the New Jersey PEOSH Indoor Air Quality Standard, a person has been designated as the person responsible for Ramapo College’s compliance with the standard. This person is: Gina Mayer-Costa 201-684-7531. She is the Director of Environmental Health and Safety for Ramapo College.

The designated person is the person who has been trained and given the responsibility by Ramapo College to make routine visual inspections, review preventive maintenance programs, and have access to required records in order to ensure compliance with the IAQ Standard. The designated person is also assigned to assist with employee concerns/complaints about indoor air quality, conduct investigations, facilitate repairs or further investigation as necessary, maintain required records, and review 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. Damaged and inoperable components will be repaired or replaced as appropriate and a work order to show actions taken will be completed.

The following maintenance schedule is followed in all buildings. Twice a year (spring and fall) the following is completed on every unit:
  a) Filters are changed.
  b) System is checked for proper operation.
  c) Condensate pans are inspected and biocide treatment is added as needed.
  d) Indoor coils are inspected and cleaned as needed.

Most campus HVAC equipment, other than individual residence hall rooms, is remotely monitored by building automation systems. An alarm is generated whenever a piece of equipment is performing outside of specifications. The alarm is received in the Office of Facilities Management and an HVAC technician is dispatched as soon as possible.
Recordkeeping
Documentation of preventive maintenance and repairs to the ventilation system is retained for at least 3 years. This information is maintained by the Office of Facilities Management and includes:

a) Date that preventive maintenance or repair was performed
b) 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 proper operating order and

Indoor Air Quality Compliance Documents
Ramapo College will make reasonable efforts to obtain and maintain copies of IAQ compliance documents. Available IAQ compliance documents will be available to PEOSH during an inspection. These documents are maintained by the Office of Facilities Management and may include:

1. Construction documents,
2. HVAC system commissioning reports,
3. HVAC systems testing, adjusting, and balancing reports,
4. Operations and maintenance manuals for most equipment,
5. Operator training materials.

Investigating Complaints
If employees begin to experience health symptoms that they believe are related to poor indoor air quality, they should initially notify the Service Desk in the Office of Facilities Management. A work request can be entered at http://repairs.ramapo.edu/ anytime (which is preferred) or by phone during normal business hours at x7660. The Office of Facilities Management works together in many situations with the Designated Person to address indoor air quality issues.

Employees can also call the Designated Person directly to discuss concerns related to indoor air quality. The Designated Person has been trained and given the authority to conduct basic indoor air quality complaint investigations. In most cases IAQ complaints can be resolved by the Designated Person together with the Office of Facilities Management.

Responding to Signed Employee Complaints to PEOSH
If the College receives a written notification from PEOSH that a signed employee complaint has been filed with PEOSH, the College will conduct an investigation. The findings of the initial investigation and any planned actions will be provided in a written response to PEOSH within fifteen (15) working days of receipt. Copies of all responses or any information sent 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 hazardous 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 Facilities Service Desk immediately if they observe evidence of water intrusion so that corrective action can be taken. The Service Desk can be contacted at http://repairs.ramapo.edu/ (which is preferred) or by phone at x7660. If you report an issue through the online service desk (iService Desk), you will be assigned a repair number that you can follow up with and you will get a ‘completion’ email when it is resolved. If immediate response is needed after 4:30 pm, or during other non-staffed hours, please call Public Safety at x7432. Ceiling tiles, carpet, and wall boards not dried within 48 hours may be removed as directed by the Designated Person.

Controlling Air Contaminants
Outside air
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.

Point Source Contaminants
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 Facilities Service Desk should be contacted. The Service Desk can be contacted at http://repairs.ramapo.edu/ (which is preferred) or by phone at x7660. If you report an issue through the online service desk (iService Desk), you will be
assigned a repair number that you can follow up with and you will get a ‘completion’ email when it is resolved. The Facilities Service Desk will open a work order ticket to investigate whether the HVAC system is operating properly. If not, the system will 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 (CO₂) concentrations exceed 1,000 parts per million (ppm), and the room is not equipped with operable windows, the Office of Facilities Management 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 Office of Facilities Management or 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 air pressure gradient between the work area and occupied areas.

If work is being performed by an outside contractor, the Office of Facilities Management or Designated Person will maintain communication with the project manager to ensure that the contractor complies 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 the Designated Person so that they can be accurately assessed and investigated when indicated. The Benefits Office must also be immediately contacted regarding any potential exposures to an air contaminant.
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).

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. water leaks, visible mold) they should notify the Facilities Service Desk of the situation so that it can be addressed promptly. The Service Desk can be contacted at http://repairs.ramapo.edu/ (which is preferred) or by phone at x7660. If you report an issue by the online service desk (iService Desk), you will be assigned a repair number that you can follow up with and you will get a ‘completion’ email when it is resolved. If immediate response is needed after 4:30 pm, or during other non-staffed hours, please call Public Safety at x7432.

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

This written Indoor Air Quality Program will be reviewed at least annually to reflect changes in policies, procedures, responsibilities, and contact information. Below are the review dates of this plan:

- August 8, 2008
- November 9, 2009
- December 14, 2010

- April 25, 2011
- May 23, 2012