

 Portland Community College Health & Safety Manual	Dept: Environmental Health & Safety	
	Topic: Chapter 19 — Indoor Air Quality & Industrial Hygiene Monitoring Plan	
	Board Policy: B507	Revised Date: September 2026

Authority	PCC Board Policy—B507
	Portland Community College is committed to providing a safe and healthy work and educational environment for employees, students and visitors.

Summary	This plan establishes procedures for maintaining good indoor air quality as well as reporting indoor air quality concerns. Anticipated departmental responses to such concerns are described in the Plan. The Plan also addresses industrial hygiene consultative services offered through the EH&S department.
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I. PURPOSE

The purpose of this *Indoor Air Quality & Industrial Hygiene Monitoring Plan* is to establish procedures that protect PCC employees from potential health hazards associated with indoor air quality (IAQ) contaminants and workplace exposures. This Plan is intended to help prevent IAQ concerns from developing, ensure concerns are documented when they do arise, and provide a process for requesting IAQ support and/or industrial hygiene (IH) consultative services. This Plan applies to all PCC operations and employees.

II. AUTHORITY

PCC Board Policy – B507

OAR 1910.1020: Oregon OSHA Division 2 Subpart Z, Access to Employee Exposure and Medical Records

OAR 437-002-0382: Oregon OSHA Division 2 Subpart Z, Oregon Rules for Air Contaminants

III. RESPONSIBILITY

A. Employees:

- Receiving training in the College's indoor air quality procedures
- Being knowledgeable about department hazard controls to eliminate/reduce IAQ concerns
- Paying attention to notifications and signs regarding building construction, demolition and renovation projects
- Following established procedures for reporting IAQ concerns
- Completing an *Online Injury/Illness/Near-Miss Report* when experiencing signs or symptoms of exposure to an IAQ contaminant

B. Supervisors/Managers/Deans:

- Receiving training in the College's IAQ procedures
- Assessing and controlling departmental hazards that may contribute to IAQ concerns
- Participating in design reviews and meetings regarding construction, demolition and renovation projects, proposals, and plans that impact their work areas
- Disseminating to staff notifications regarding upcoming building construction, demolition and renovation projects
- Addressing employee concerns about IAQ and provide direction to achieve resolution
- Allocating fiscal resources to fund industrial hygiene (IH) consultative services; assisting EH&S with scopes of work for such services

C. Environmental Health & Safety (EH&S):

- Maintaining College-wide Plan on IAQ and IH
- Developing employee training for IAQ
- Maintaining active purchase orders with local, reputable IH consultants

- Reviewing AiM daily for IAQ-related work orders and investigating each when required
- Investigating employee *Online Injury/Illness/Near-Miss Reports* alleging exposure to IAQ contaminants

D. Facilities Management Services (FMS):

- Maintaining the College's Building Automation (HVAC) System
- Notifying affected departments of upcoming building construction, demolition and renovation projects that may impact IAQ
- Responding to IAQ concerns
- Providing and performing regular maintenance, repair, and service activities on College HVAC systems

E. Public Safety:

- Responding to emergencies involving IAQ
- Providing support to FMS and/or EH&S, as requested, for IAQ concerns
- Responding to reports of tobacco-related issues on PCC property or those involving excessive vehicle idling
- Providing guidance to the Associate Vice President of College Operations regarding IAQ matters

F. Office of Planning & Construction (OPC)

- Notifying affected departments of upcoming building construction, demolition and renovation projects, including their scope, magnitude and timing
- Ensuring contractors implement and maintain applicable hazard controls to prevent IAQ issues
- Responding to IAQ concerns resulting from OPC work areas

G. People Strategy, Equity and Culture (PSEC):

- Providing Federation and regulatory support to managers inquiring about IAQ concerns
- Maintaining the College's learning management system that support online IAQ training and training records

H. Associate Vice President of College Operations:

- Evaluating organizational and/or program risk assessments related to IAQ
- Making decisions regarding PCC's operational activities when impacted by extreme heat and/or wildfire smoke.
- Communicating IAQ-related organizational decisions to Office of Public Relations

I. Office of Public Relations:

- Providing communications to PCC staff and students regarding closures involving indoor air quality concerns impacting the College

IV. PROCEDURES

Indoor air quality can affect a person's health, comfort, and ability to work. IAQ can be impacted by a variety of factors, including but not limited to temperature, humidity, ventilation, mold from water damage, or airborne chemicals in the form of dusts, mists, fumes, fibers, gases, vapors, or smoke. Currently, OSHA has no IAQ standards but it does provide guidelines about the most common IAQ workplace complaints. The procedures listed below describe PCC's approach and division of labor with respect to maintaining good IAQ. For more information about IAQ contaminants, see *Appendix B: Types & Sources of IAQ Contaminants*.

Note: The mere presence of a detectable or discernable IAQ contaminant or condition may subjectively affect an individual's level of comfort, but is usually not an indication that the contaminant or condition is actually causing harm to that individual. It is unproductive and disruptive for such individuals to assume the worst with respect to any potential health effects associated with "perceived" hazards. Employees should report IAQ concerns to their management following the process described in Section IV. E. – *Reporting IAQ Concerns*. For more information on different detection methods, see *Appendix C: Detection of IAQ Contaminants*.

A. Maintenance of Indoor Air Quality

1. Temperature - Facilities Management Services (FMS) maintains indoor air temperatures between 68-74°F in winter and 72-80°F in summer in accordance with State of Oregon and the American Society of Health, Refrigeration and Air Conditioning Engineers (ASHRAE). Most indoor spaces at PCC are equipped with sensors allowing FMS to continuously monitor indoor temperatures via the Building Automation System (BAS). The BAS is able to respond to temperature fluctuations beyond these established ranges by automatically heating or cooling the air to maintain the desired temperature ranges.
2. Humidity - FMS is able to measure humidity via the BAS but not completely control it. FMS is able to dehumidify indoor spaces via the means of a building's air conditioning.
3. Air Flow – FMS is able to measure the amount of supplied air entering a space as well as the amount of exhaust air leaving a space. These measurements, along with the volume of the room, help FMS to determine the air exchange rate (air changes per hour) of the space. Areas of higher hazard will typically have greater air exchange rates than those of lower hazard.
4. Housekeeping – Maintaining housekeeping in the workplace is important and can contribute to positive indoor air quality. All employees have a role with respect to basic housekeeping functions such as:

- a. **Trash Removal** – Employees are required to discard trash and recyclable materials at the point of generation into the appropriate receptacles provided for a given space. FMS Custodians will remove trash and recyclable materials from the larger area containers daily. Trash and recyclable containers in common areas are emptied more frequently depending upon demand. If a particular odoriferous item is placed into a trash container after the Custodial team has already serviced an area, employees should contact FMS via ReADY to request additional Custodial support for the day.
 - b. **Dust Control** – Excessive dust accumulations may contribute to indoor air quality. The presence of visible dust accumulations on surfaces may indicate that housekeeping is an issue or that something out of the ordinary is occurring. The FMS Custodial team performs basic housekeeping functions in the common areas of the College. In other areas of the College, employees are responsible for regularly removing dusts. The Custodial team should be contacted via ReADY when dust levels in offices, labs, studios, classrooms, and shops begin to buildup.
 - c. **Floor Care** – Routine indoor floor maintenance services are performed upon request by contacting the FMS Custodial team. Services include: vacuuming, mopping and/or waxing of hard surfaces, and shampooing carpeting and upholstery. The Custodial team will also respond to requests to clean up incidental spills (water, soft drinks and food related items) as well as biohazardous spills (blood, vomit, other body fluids). The FMS Maintenance team should be contacted to repair any damaged floor materials or carpeting. Employees requesting such floor care services can reach the Custodial and Maintenance teams via ReADY.
5. **Food Storage** – Employees should store perishable food in refrigerators or in dedicated containers that employees use to transport and store food daily. Dry goods that are frequently used can be stored in common break rooms. Unconsumed prepared food should not be left out overnight.
6. **Refrigerators** – Department refrigerators are provided for employee use. Department employees should ensure that refrigerators are cleaned frequently and that old, uneaten food items are discarded regularly. The addition of a small box of baking soda can help to reduce food odors inside of refrigerators. Occasionally, a drip trap behind or underneath a refrigerator may accumulate water. The trap should be checked, emptied, and cleaned regularly by employees that use the refrigerator to prevent/minimize odors and/or spills.
7. **P-Traps & Sewer Gas** - P-traps are present beneath sinks, plumbing fixtures and floor drains. The function of a P-trap is to hold a small amount of water, creating an airtight seal that prevents foul odors and sewer gases from entering occupied

spaces. Water enters a P-trap whenever water drains from the fixture. At PCC, primers are used to periodically add small quantities of water to P-traps to prevent odors from escaping. However, when plumbing fixtures aren't used frequently, the water in a P-trap may evaporate and subsequently allow odors and gases to emanate from the fixture. When such gases are detected, employees should run approximately 1 liter of water through the fixture to recreate the airtight seal in the P-trap.

8. Loading Docks – When vehicles with internal combustion engines are in the process of being loaded or unloaded at loading docks, drivers should turn off their vehicles whenever the rollup and/or pedestrian doors leading to the loading dock is open. When these doors remain closed during loading and unloading operations, vehicle idling should not exceed 5 minutes.
9. Warehouse Operations – Operators of powered industrial trucks, equipped with internal combustion engines, may operate inside of warehouses when efforts to dilute any vehicle exhaust are implemented. Efforts include opening exterior rollup doors and/or applying local exhaust ventilation in the form of fans. Operation of such vehicles inside warehouses should be kept to a minimum.

B. Department IAQ Hazard Controls

Some departments have specialized equipment available to them to control the emissions of dusts, mists, fumes, fibers, gases, vapors, and smoke that are generated during the routine operation of equipment or during academic or department activities. Such equipment includes but is not limited to paint booths, sandblasting equipment, chemical fume hoods, downdraft tables, and other means of providing local exhaust ventilation at the point of operation. Departments that utilize such equipment are responsible for the maintenance and upkeep of the systems controlling airborne emissions. At the very least, when these systems and their associated control mechanisms are not operating as required by the manufacturer specifications, or at all, affected departments should cease operations that generate the airborne emissions to prevent them from spreading within department space(s) or beyond.

1. Local Exhaust Ventilation – Devices, machines, and operations equipped with either fixed or portable exhaust units must be maintained by the using department to ensure that they effectively capture airborne contaminants. This may involve changing filters, adjusting fan speeds, or locating work as close as possible to the exhaust shroud of the ventilation system.
2. Paint Booths - Paint booth filters need to be changed regularly for the booth to capture airborne contaminants. The frequent inspection of the filters, pressure gauges, and other features associated with the paint booth is a responsibility of the using department. Facilities Management Services may be involved with the disposal of the used filter media.

3. **Chemical Fume Hoods** - Chemical fume hoods are utilized in the Science labs to contain and evacuate harmful gases and vapors associated with demonstrations and experiments. Access to the space within fume hoods is controlled via moveable sashes which can be adjusted by the user to partially shield themselves from the hazards associated with work in the hoods. Chemical fume hoods are effective when air flows into them at established rates without obstructions. The air flowing into fume hoods should never be blocked and specimens, materials, and waste should not be stored within fume hoods. Concerns about material/waste storage either in or around chemical fume hoods should be resolved by the using department. Concerns about chemical fume hood fan and alarm maintenance should be addressed to Facilities Management Services by generating a ReADY request.
4. **Downdraft Tables** – Those departments that utilize downdraft tables must ensure that regular inspections of the filter media and motor are performed. Filter media must be replaced when filters are clogged or inefficient. Equipment should not be operated with missing or compromised filters.

C. IAQ Management of Building Construction, Demolition & Remodeling Projects

Building construction, demolition, and remodeling activities can contribute to indoor air quality by: generating dusts through mechanical handling of existing building materials; disruption of soil; use of power equipment; applying adhesives and finishes; and delivery of new furnishings. The following processes should be followed when undertaking or engaging in building construction, demolition & remodeling:

1. **Communications to Affected Departments** – Project Managers from FMS and/or OPC should notify affected personnel about the scope, magnitude and timeline of upcoming projects well before the project commences. Email notifications should be sent to all personnel potentially impacted by a project; both employees and managers. Recognized activities and known hazards and controls should be described in the notification along with the name and contact information of the Project Manager overseeing the project. Additionally, notifications should contain links to department webpages and/or applicable procedures to facilitate the acquisition of additional information by concerned employees. Copies of such notifications should be preserved for future reference. Updates to such notifications should be provided whenever there are changes in the project schedule or unforeseen hazards are discovered. Signs should be posted whenever necessary to indicate the presence of any recognized hazards and the means to control exposure to such hazards.
2. **Communications Within Affected Departments** – Management of affected departments should also communicate their understanding of a project's parameters to their employees impacted by the project. Such communication should be made

via email, signs, staff meeting discussions, etc., and include the name of a focal point within the department should questions arise.

D. Reporting Procedures for IAQ Concerns

Individuals with concerns about IAQ should attempt to identify the cause of the concern and address their concerns with their direct manager or supervisor, who may direct the concerned party to take a particular course of action. Managers and supervisors should address the employee's concerns and may also direct their employees to:

- Submit a ReADY request through the Facilities Management Services webpage
- Contact Environmental Health & Safety via ehs@pcc.edu
- Contact the Project Manager for OPC or FMS projects
- Complete an [Online Injury/Illness/Near-Miss Report](#) (to be completed when an individual is showing signs or symptoms of exposure to a perceived indoor air quality contaminant or concern)
- Contact Public Safety via (971) 722-4444 (when there is an emergency condition)

In the event that the manager or supervisor is unavailable, employees should escalate the concern by taking one of the following actions:

- Informing the next higher level of management within their organization
- Contacting a member of the local Campus/Center Safety Committee
- Completing a *Hazardous Condition Report* (ref. *H&SM Ch 1*)

In the event of a medical emergency, concerned employees should contact Public Safety at (971) 722-4444.

Additional steps that employees can take to positively impact IAQ can be found in *Appendix D: Employee Actions to Improve IAQ*.

E. Responding to IAQ Concerns - All properly reported IAQ concerns will generate a response from the applicable campus/center authorities. The following provides a description of each responding departments' typical actions:

1. FMS – The Service Request Center (SRC) receives IAQ-related ReADY requests, prioritizes them based on urgency and criticality, and assigns them to the appropriate department for action. If the ReADY request involves issues involving temperature, humidity, or airflow, FMS personnel will be assigned to take action and resolve the concern. Resolution may be made relatively quickly via remote actions through the BAS or may require FMS personnel to visit the affected area. If the ReADY request involves building modifications, permits, or specialized equipment, the timing, sequence and duration of any investigation will likely be affected.

When necessary, the SRC will communicate and coordinate with EH&S and/or DPS personnel regarding the IAQ concern.

2. EH&S - The SRC will often assign IAQ concerns involving unusual or recurring chemical odors to EH&S. EH&S will typically contact the party that submitted the ReADY request to gather information prior to deploying resources. Once a decision is made to send personnel to investigate an IAQ concern, EH&S personnel will visit the area in an attempt to gain an understanding as to the source of the issue and factors contributing to its presence.

EH&S may transition from an IAQ investigation to an industrial hygiene (IH) consultative service when the situation may benefit from experts who can measure and analyze individual contaminants. IH consultative services may result from:

- The submission of a single *Online Injury/Illness/Near Miss Incident Report* for one or more persons
- The submission of multiple *Online Injury/Illness/Near Miss Incident Reports* generated by personnel in the same area or concerned with the same contaminant
- An EH&S IAQ concern when the source cannot be properly identified

EH&S' process for handling IH consultations can be found in Section IV. H. of this Plan.

3. Public Safety – Public Safety will respond to all notifications of medical emergencies that are received by their dispatchers. This can often include IAQ concerns involving one or more individuals involved displaying or expressing signs or symptoms of exposure to an IAQ contaminant. Public Safety is also the lead responding organization for building or campus-wide emergencies such as a gas leak or fire. In these situations, FMS and EH&S personnel are often notified and requested to assist DPS.
4. Project Manager – Concerns over IAQ may be generated in response to activities believed to be associated with building construction, demolition, or renovation. Project Managers respond to such concerns and investigate them by gathering information, interviewing affected personnel and contractors, and reviewing activities occurring during the time the concern was generated. Project Managers may recruit the assistance of FMS, EH&S, and DPS when necessary to help investigate IAQ concerns.
5. College Operations – Under extreme circumstances, the Vice President of College Operations will instruct the Office of Public Relations to message staff and students about any potential heat or wildfire smoke-related closures.

F. Water Intrusion & Leaks

The presence of uncontrolled or unexpected water in a building resulting from leaks can contribute to IAQ concerns. It is imperative that water intrusion concerns be reported to FMS via ReADY so they can be mitigated quickly.

FMS will attempt to respond to, and act upon, notifications of water intrusion and leaks within 24-48 hours. Common activities undertaken by FMS include removal of water, drying of affected surfaces, and removal of water-damaged materials. PCC's response to water intrusion can be found on the EH&S webpage using the link to Reference Document i: [Quick Tips – Water Intrusion & Water Damage](#).

G. Intradepartmental Considerations

Employees with IAQ concerns over any of the topics in this section of the Plan should not report them using the procedure described in Section IV.E. Instead, such employees are to be address their concerns directly with their department manager who may utilize the services of PSEC or Accessible Ed & Disability Resources. These topics include:

- Personal care products & fragrances
- Personal hygiene
- Room deodorizers
- Food odors & allergies
- Indoor plants
- Fish tanks
- Allergies to service animals (for info visit the [Service Animals](#) webpage)

H. Industrial Hygiene Consultative Services

Some indoor air quality concerns may be elevated to industrial hygiene consultative services. Such services will likely involve a more systematic approach to the determination of what compounds are present in the air within a given workspace and involve the use of instrumentation and equipment capable of sampling the air directly with a meter or via the collection of representative samples followed by laboratory analysis. Examples of IAQ concerns that may become IH consultative services include:

- Cases where one or more individuals have submitted *Online Injury/Illness/Near Miss Incident Reports*
- Cases which involve ongoing potential employee exposure to air contaminants regulated by OR OSHA at or above a regulatory action level or permissible exposure limit
- Cases in which an employee's health care provider requests monitoring or analysis of the air in the workspace

Note: IH consultative services are not always associated with an IAQ concern as described in this chapter. Managers and deans may request IH services from EH&S when evaluating new equipment, chemicals, or hazard controls. The responsibility for funding industrial hygiene consultative services often rests on the requesting department and the level of funding will likely influence the scope of work and steps

involved in the process of assessing hazards through industrial hygiene activities. Additionally, IH consultative services are not limited to the determination of airborne contaminants. Noise, vibration, radiation, and biological exposure all fall within the practice of IH. Requests for IH consultative services should be directed to EH&S. Individuals requesting such services should submit a ReADY request to EH&S who will follow the steps below:

1. Investigation – IH consultative services begin with the receipt of a concern followed by an investigation on the part of the EH&S department. This investigation will typically involve:

- Reviewing facts and documents (e.g., injury/illness reports, written procedures, product information, safety data sheets) and searching for pertinent information online;
- Interviewing personnel about the hazards and controls;
- Reviewing work orders in AiM;
- Physically reviewing the work site

During the investigation, EH&S will gather as much information about a hazard and its potential consequences prior to contacting contractors who can provide specialized assistance.

2. Specialized Contractor Support - EH&S oversees contracts with several local and reputable IH providers. Upon determination of the need to perform IH sampling, EH&S will arrange for these contractors to evaluate specified operations, collect representative samples and have the samples analyzed at properly credentialed laboratories. Contractors can often complete their sampling and observation in one visit but the complexities of a case may result in multiple visits over time by contractors.

3. Reports and Recommendations - Contractors performing IH sampling and analysis will generate written reports with their findings and recommendations to EH&S. EH&S will share the contractor's information along with any additional recommendations of their own with the affected personnel and management involved with, or requesting, such sampling.

Medical Records - IH sampling results can constitute an affected employee's exposure record to any compounds detected or for which sampling occurred. These should be treated as medical records and maintained by the department manager in the affected employee's files.

V. TRAINING

A. EH&S Training – EH&S provides employee training on topics covered in this Plan.

Online training will be housed on the College's Learning Management System (LMS).

- B. Department Training** – Managers of departments which have specialized equipment with the potential to emit airborne contaminants should develop and deliver training to their employees to ensure that hazard controls are in place and operable and that affected employees know how to use such equipment safely.

VI. RECORDKEEPING

All records are to be retained by the applicable departments for the duration established by the Oregon State Archives in conjunction with governmental regulations. These include:

A. Training Records:

1. EH&S Training – District-level *Indoor Air Quality* training records will be maintained in the College's Learning Management System (LMS), maintained by PSEC.
2. Department Training – Managers should maintain records of any department training they conduct on this or any other topic.

B. Industrial Hygiene Reports

EH&S maintains IH reports from its contractors either in paper, or electronically in AiM, for each associated work order requesting such services.

C. Employee Records

1. PSEC maintains records regarding paid leaves and doctors' releases for employees
2. Risk Services maintains records regarding *Online Injury/Illness/Near Miss Incident Reports* and Workers Compensation claims for employees
3. Department managers maintain records regarding employee exposure and medical records, including any records of exposure resulting from IH monitoring.