

Indoor and Outdoor Air Quality Program

Contact: Director of Risk Management

1. Rogue Community College (RCC) is committed to the safety of all employees regarding air quality in the workplace. Rogue Community College is also committed to complying with all applicable federal, state and local health and safety codes and regulations. To ensure that all affected employees are provided with the necessary information and training, the following Indoor and Outdoor Air Quality Program has been established. All employees of Rogue Community College will participate and comply with all sections of the Indoor and Outdoor Air Quality Program. The written Indoor and Outdoor Air Quality Program is reviewed, updated and maintained by the Rogue Community College Risk Management Department. A printed copy of the program is available at the Risk Management office and online at <https://web.roguecc.edu/risk-management/campus-occupational-safety>.
2. Responsibilities
 - a. Employer
 - i. Rogue Community College will evaluate, develop and implement each area of the Indoor Air Quality (IAQ) and Outdoor Air Quality (OAQ) Program as required and or recommended by Oregon OSHA, the Clean Air Act, the Center for Disease Control and the National Institute for Occupational Safety and Health.
 - b. Employee
 - i. All employees of Rogue Community College will comply with each area of the Indoor and Outdoor Air Quality Program while employed at RCC.
3. Air Quality Coordinator
 - a. The Director of Risk Management is responsible for managing the Indoor and Outdoor Air Quality Program at RCC including:
 - i. Training employees in the recognition, prevention, and resolution of OAQ and IAQ problems.
 - ii. Communicating with building occupants concerning OAQ and IAQ issues or problems.
 - iii. Developing a procedure for documenting and responding to OAQ and IAQ complaints and problems.
 - iv. Maintaining OAQ and IAQ records. OAQ and IAQ records include:
 - B. OAQ and IAQ complaints and resolutions; and documentation of any maintenance, repair, or remodeling activity that could adversely impact indoor air quality.
 - C. Indoor Air Quality Compliance Information. RCC will make reasonable efforts to obtain and maintain copies of IAQ

compliance information. Available IAQ compliance information will be maintained by the Director of Facilities, and will be available during inspections. This information may include, when available:

- a. Construction information
 - b. HVAC system commissioning information
 - c. HVAC systems testing, adjusting, and balancing information
 - d. Operations and maintenance manuals
 - e. Operator training materials
 - v. Conducting an annual, at the minimum, documented inspection of the premises. The IAQ Building Evaluation and Assessment Tool (I-BEAM), produced by the Environmental Protection Agency (EPA) will be used to assist with these annual inspections.
4. If you believe there is a problem with the indoor air quality of your workspace, please contact Risk Management and Facilities to discuss your concerns. Risk Management and Facilities will work with you to assess, identify, and help resolve the situation.
5. Indoor air quality (IAQ) refers to the air quality within and around buildings and structures, such as an office or other occupied work space on campus, especially as it relates to the health and comfort of building occupants. Research conducted by the Environmental Protection Agency (EPA) shows that Americans, on average, spend about 90 percent of their time indoors. Most people are aware that outdoor air pollution can impact their health, but indoor air pollution may also have significant effects. Pollution indoors may potentially be significantly higher than outdoor levels for certain contaminants under particular circumstances.
6. Benefit of mitigating IAQ Concerns
- a. Good IAQ in buildings is an important component of a healthy indoor environment. It contributes to a favorable and productive environment for building occupants, giving them a sense of comfort, health and well-being. Significant increases in worker productivity have also been demonstrated when the air quality was adequate. Research has also shown that workers in buildings with adequate air quality have reduced rates of symptoms related to poor air quality.
7. Acceptable Indoor Air Quality Parameters
- a. The Occupational Safety and Health Administration (OSHA) has established recommended IAQ and thermal comfort values for common parameters in office

spaces listed below. These ranges reflect parameter values which most building occupants would find acceptable.

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|---------------------------------------|--|
| i. Temperature | 68 – 76 degrees F |
| ii. Carbon Dioxide (CO ₂) | Less than 1000 ppm (parts per million) |
| iii. Relative Humidity | 20 – 60 % (Ideally 30 – 50 %) |

8. Many indoor air pollutants cannot be detected by our senses, and the symptoms they produce can be vague. Often, it is difficult to determine which pollutant or pollutants are the sources of a person's ill health, with some symptoms not showing up until years later. Common symptoms of exposure to indoor air pollutants include:

- a. Headaches
- b. Fatigue
- c. Dizziness
- d. Nausea
- e. Itchy nose and eyes
- f. Scratchy throat
- g. More serious effects are breathing disorders, heart disease and cancer.

9. According to NIOSH, the most common sources of indoor air quality issues are the following:

- a. Inadequate ventilation - 52%
- b. Contamination from inside building - 16%
- c. Contamination from outside building - 10%
- d. Microbial contamination - 5%
- e. Contamination from building fabric - 4%
- f. Unknown sources - 13%

10. Indicators of Poor Indoor Air Quality

- a. Odors
- b. Dirty or unsanitary conditions (e.g., excessive dust)
- c. Visible fungal growth or moldy odors (often associated with problem of too much moisture)
- d. Sanitary conditions at equipment such as drain pans and cooling towers
- e. Poorly-maintained filters
- f. Signs of mold or moisture damage at walls (e.g., below windows, at columns, at exterior corners), ceilings, and floors
- g. Staining and discoloration (Note: Make sure that stains are removed after leaks are repaired so that there will be visible evidence if the leak recurs.)
- h. Smoke damage (Note: If a fire has occurred involving electrical equipment, determine whether PCBs (polychlorinated biphenyls) may have been released from the equipment.)

- i. Presence of hazardous substances
- j. Potential for soil gas entry (e.g., unsealed openings to earth, wet earth smells)
- k. Unsanitary mechanical room, or trash or stored chemicals in mechanical room
- l. Unusual noises from light fixtures or mechanical equipment
- m. Inadequate maintenance:
 - i. Look for leaks of oil, water, or refrigerants around HVAC equipment.
 - ii. Also, be aware of signals such as unreplaced burned-out light bulbs in fan chambers.
 - iii. Dry drain traps can also cause indoor air quality problems. If traps are not kept charged with liquid, they could be allowing sewer gas to enter occupied spaces.
- n. Signs of occupant discomfort:
 - i. Notice uneven temperatures, persistent odors (including odors coming from occupants and/or their clothing), drafts, sensations of stuffiness.
 - ii. Look for propped-open corridor doors, blocked or taped up diffusers, popped-up ceiling tiles, people using individual fans/ heaters or wearing heavier (or lighter) clothing than expected.
- o. Overcrowding:
 - i. Future occupant density is estimated when the ventilation system for a building is designed. When the actual number of occupants approaches or exceeds this occupant design capacity, managers may find that IAQ complaints increase. At that point, the outdoor air ventilation rate will have to be increased. However, the ventilation and cooling systems may not have sufficient capacity to handle the increased loads from the current use of the space.
- p. Blocked airflow: Check for underventilation caused by obstructed vents, faulty dampers or other HVAC system malfunctions, or from problems within the occupied space. Furniture, papers, or other materials can interfere with air movement around thermostats or block airflow from wall or floor-mounted registers. If office cubicles are used, a small space (i.e., two to four inches) between the bottom of the partitions and the floor may improve air circulation.
- q. Ceiling plenums:
 - i. Lift a ceiling tile and examine the plenum for potential problems. Walls or full-height partitions that extend to the floor above can obstruct or divert air movement in ceiling plenums unless transfer grilles have been provided. If fire dampers have been installed to allow air circulation through walls or partitions, confirm that the dampers are open. Construction debris and damaged or loose material in the plenum area may become covered with dust and can release particles and fibers.
- r. Heat sources:
 - i. Be aware of areas that contain unusual types or quantities of equipment such as copy machines or computer terminals. Also look for instances of over-illumination. High concentrations of electrical fixtures and equipment can overwhelm the ventilation and cooling systems.

- s. Special use areas:
 - i. Confirm that the HVAC system maintains appropriate pressure relationships to isolate and contain odors and contaminants in mixed-use buildings and around special use areas. Examples of special use areas include loading docks, print shops, janitorial closets, storage areas, and kitchens.
- t. Improperly located vents, exhausts and air intakes:
 - i. Check the outdoor air intakes to see whether they are located near contaminant sources (e.g., plumbing vents, exhaust outlets, dumpsters, loading docks, outdoor designated smoking areas, or other locations where vehicles idle).
- u. Unsanitary mechanical rooms:
 - i. See if the space containing the HVAC system is clean and dry. Examples of problems include: cleaning or other maintenance supplies stored in mechanical room; dust and dirt buildup on floors and equipment; moisture in mechanical room because of inadequate insulation, lack of conditioned air, or failure to provide for air movement. Unsanitary conditions in the mechanical room are particularly a problem if unducted return air is dumped into and circulated through the mechanical room.

11. Sources

- a. Outside Building
 - i. Contaminated outdoor air sources
 - B. Pollen, dust, fungal spores
 - C. Industrial pollutants
 - D. General vehicle exhaust
 - ii. Emissions from nearby sources
 - B. Exhaust from vehicles on nearby roads or in parking lots, or garages
 - C. Loading docks
 - D. Odors from dumpsters
 - E. Re-entrained (drawn back into the building) exhaust from the building itself or from neighboring buildings
 - F. Unsanitary debris near the outdoor air intake
 - iii. Soil gas
 - B. Radon
 - C. Leakage from underground fuel tanks
 - D. Contaminants from previous uses of the site (e.g., landfills)
 - E. Pesticides
 - iv. Moisture or standing water promoting excess microbial growth
 - B. Rooftops after rainfall
 - C. Crawlspace

- b. Equipment
 - i. HVAC system
 - B. Dust or dirt in ductwork or other components
 - C. Microbiological growth in drip pans, humidifiers, ductwork, coils
 - D. Improper use of biocides, sealants, and/ or cleaning compounds
 - E. Improper venting of combustion products
 - F. Refrigerant leakage
 - ii. Non-HVAC equipment
 - B. Emissions from office equipment (volatile organic compounds, ozone)
 - C. Supplies (solvents, toners, ammonia)
 - D. Emissions from shops, labs, cleaning processes
 - E. Elevator motors and other mechanical systems
- c. Human Activities
 - i. Personal activities
 - B. Smoking
 - C. Cooking
 - D. Body odor
 - E. Cosmetic odors
 - ii. Housekeeping activities
 - B. Cleaning materials and procedures
 - C. Emissions from stored supplies or trash
 - D. Use of deodorizers and fragrances
 - E. Airborne dust or dirt (e.g., circulated by sweeping and vacuuming)
 - iii. Maintenance activities
 - B. Microorganisms in mist from improperly maintained cooling towers
 - C. Airborne dust or dirt
 - D. Volatile organic compounds from use of paint, caulk, adhesives, and other products
 - E. Pesticides from pest control activities
 - F. Emissions from stored supplies
- d. Building Components and Furnishings
 - i. Locations that produce or collect dust or fibers
 - B. Textured surfaces such as carpeting, curtains, and other textiles
 - C. Open shelving
 - D. Old or deteriorated furnishings
 - E. Materials containing damaged asbestos
 - ii. Unsanitary conditions and water damage
 - B. Microbiological growth on or in soiled or water-damaged furnishings
 - C. Microbiological growth in areas of surface condensation
 - D. Standing water from clogged or poorly designed drains
 - E. Dry traps that allow the passage of sewer gas

- iii. Chemicals released from building components or furnishings
 - B. Volatile organic compounds or
 - C. Inorganic compounds
 - e. Other Sources
 - i. Accidental events
 - B. Spills of water or other liquids
 - C. Microbiological growth due to flooding or to leaks from roofs, piping
 - D. Fire damage (soot, PCBs from electrical equipment, odors)
 - ii. Special use areas and mixed-use buildings
 - B. Laboratories
 - C. Print shops, art rooms
 - D. Exercise rooms
 - E. Beauty salons
 - F. Food preparation areas
 - iii. Redecorating/remodeling/repair activities
 - B. Emissions from new furnishings
 - C. Dust and fibers from demolition
 - D. Odors and volatile organic and inorganic compounds from paint, caulk, adhesives
 - E. Microbiologicals released from demolition or remodeling activities

12. Periodic walkthroughs to assess the current IAQ situation

- a. The Director of Risk Management and an assigned member of the Facilities Department, chosen by the Director of Facilities and Operations, will conduct periodic walkthrough inspections which involves both occupied areas and mechanical rooms. During the walkthrough, IAQ problem indicators are checked and noted on a floor plan or comparable drawing, including:
 - i. Odors
 - ii. Dirty or unsanitary conditions
 - iii. Visible fungal growth or moldy odors
 - iv. Evident moisture in inappropriate locations (e.g., moisture on walls, floors, or carpets)
 - v. Staining or discoloration of building material(s)
 - vi. Smoke damage
 - vii. Presence of hazardous substances
 - viii. Unusual odors from equipment
 - ix. Poorly-maintained filters
 - x. Uneven temperatures
 - xi. Personal air cleaners (e.g., ozone generators, portable filtration units) or fans
 - xii. Inadequate ventilation
 - xiii. Inadequate exhaust air flow

- xiv. Blocked vents
- xv. Other conditions that could impact IAQ, especially risk factors that need regular inspection to prevent IAQ problems from occurring (e.g., drain pans that do not fully drain).
- xvi. The condition and operations of the HVAC system are inspected, including:
 - B. Components that need to be repaired, adjusted, cleaned, or replaced have been, and work orders prepared.
 - C. Actual control settings and operating schedules for each air handling unit have been recorded and filed, and checked against the design intent.
 - D. Preventive maintenance schedules that follow manufacturers' specifications are in place for heating, ventilation and air conditioning systems (HVAC) systems campus wide. The preventive maintenance schedule is managed by the Facilities Department. Damaged and inoperable components will be repaired or replaced as appropriate and a work order to show actions taken will be completed.
 - E. Information regarding preventive maintenance and repairs to the ventilation system is retained by the Facilities Department for at least 3 years and may include the following information:
 - a. Date that preventive maintenance or repair was performed.
 - b. Person or company performing the work.
 - c. Documentation of checking and/or changing air filters.
 - d. Checking and/or changing belts.
 - e. Lubrication of equipment parts.
 - f. Checking the functioning of motors.
 - g. Confirming that equipment is in operating order.
 - h. Checking for microbial growth in condensate pans or standing water.
- xvii. Areas with significant sources of contaminants (e.g., copy rooms, food service areas, printing/photographic areas) are provided with adequate exhaust. Other sources are moved as close to exhaust as possible.

13. Steps RCC can take to Improve Indoor Air Quality (Control Methods)

- a. There are three basic control methods for lowering concentrations of indoor air pollutants:
 - i. Source management
 - B. Source management includes removal, substitution, and enclosure of sources. It is the most effective control method when it can be applied practically.

ii. Engineering controls

- B. Local exhaust, such as a canopy hood, is very effective in removing point sources of pollutants before they can be dispersed into the building's indoor air.
- C. General dilution ventilation systems, when properly designed, operated, and maintained, will control normal amounts of air pollutants. A well-designed and functioning HVAC system controls temperature and relative humidity levels to provide thermal comfort, distributes adequate amounts of outdoor air to meet the ventilation needs of building occupants, and also dilutes and removes odors and other contaminants. Testing and rebalancing of HVAC systems are essential when partitions are moved in buildings.
- D. Air cleaning primarily involves the removal of particles from the air as the air passes through the HVAC equipment. Most HVAC system filtration is provided to keep dirt off of coil surfaces to promote heat transfer efficiency. Most smudging observed around air supply diffusers in a ceiling result from entrainment(trapping) of dirt particles in the space that accumulate there.

iii. Administrative controls

B. Work Schedule

- a. Through scheduling, managers can significantly reduce the amount of pollutant exposure in their buildings. For instance:
 - i. Eliminate or reduce the amount of time a worker is exposed to a pollutant (i.e., scheduling maintenance or cleaning work to be accomplished when other building occupants are not present).
 - ii. Reduce the amount of chemicals being used by or near workers (i.e., limit the amount of chemicals being used by the worker during maintenance or cleaning activities).
 - iii. Control the location of chemical use (i.e., perform maintenance work on moveable equipment in a maintenance shop as opposed to the general area, or locate the equipment (e.g., printers, copiers) in a separate room).
- C. Education of building occupants regarding IAQ is important If occupants are provided with information about the sources and effects of pollutants under their control, and about the proper operation of the ventilation system, they can alert their supervisor and/or take action to reduce their personal exposure.

- D. Housekeeping practices should include preventing dirt from entering the environment (using, for example, walk-off mat systems), removing dirt once it is in the building, disposing of garbage storing food properly, and choosing cleaning products and methods that minimize the introduction of pollutants into the building.

14. Steps Employees can take to improve Indoor Air Quality

- a. Ensure that ventilation systems are in good working order. Please contact Facilities if you have any concerns, including cleaning vents, steam leaks, split system ACs, changing filters, ventilation rate/status, etc.
- b. Report water leaks as soon as possible to Facilities. Damp materials can lead to microbial growth and humidity problems.
- c. Control humidity. Humidity levels can affect comfort and can lead to microbial growth if elevated. Humidity should primarily be controlled through appropriate ventilation; however, it may also be necessary to employ other means of adjustment. Use of humidifiers, dehumidifiers, or air conditioning units may be appropriate. Prior to using a humidifier or dehumidifier in your workspace, please contact Risk Management and Facilities if you believe there is an issue with humidity in your area.
- d. Clean surfaces and personal items regularly. Cleaning regularly can reduce airborne allergens and other potential irritants. It is up to office occupants to clean their office, desks and other personal spaces.
- e. Please consult Risk Management and Facilities before using an air purifier in your work space.
- f. Use of scented products and air fresheners can introduce air pollution. Please consult Risk Management and Facilities before using these types of products.
- g. Do not use pesticides in your office area. If you believe you have a pest control issues, please contact Facilities for assistance.

15. Renovation and Construction Projects

- a. When the services of architects, engineers, contractors, or other professionals are used, IAQ concerns, such as special exhaust needs, are discussed with the Director of Risk Management and the Facilities Department prior to the work occurring.
- b. 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 Director of Risk Management in coordination with the Facilities Department will utilize the following protocol to assure that employees' exposure to potentially harmful substances is minimized:

- i. Obtain Safety Data Sheets (SDS) for all products to be utilized on the project and insure they are maintained on-site throughout the duration of the project.
 - ii. Insure that the least toxic product that is technically and economically feasible is used.
 - iii. Consider performing the renovation/construction project when building is least occupied.
 - iv. Consider temporarily relocating employees to an alternate worksite.
 - v. Notify potentially affected employees, in writing, at least 24 hours prior to commencement of chemical use or dust generation.
 - vi. Isolate the work area from occupied areas.
 - vii. Use mechanical ventilation and local exhaust ventilation to maintain a negative pressure gradient between the work area and occupied areas.
- c. In the course of renovation or construction, before selection and use of paints, adhesives, sealants, solvents or installation of insulation, particle board, plywood, floor coverings, carpet backing, textiles, or other, the Director of Facilities in coordination with the Director of Risk Management 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 Director of Risk Management will maintain records of this evaluation for compliance recordkeeping purposes.
- d. The Director of Facilities will coordinate with the Director of Risk Management to consider the feasibility of conducting renovation/construction work using appropriate barriers, conducting the work 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.
- e. Temporary barriers may be utilized to provide a physical isolation between the construction area and occupied areas of the building.
- f. 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.
- g. If work is being performed by an outside contractor, the Director of Risk Management in coordination with the Facilities Department will maintain communication with contractor personnel to ensure they comply with the requirements of this program.
- h. Employees who have special concerns about potential exposures during or after renovation/construction/repair work should consult with the Director of Risk Management. 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 Director of Risk Management so that they can be accurately assessed and investigated when indicated.

16. Integrated Pest Management

- a. Integrated Pest Management (IPM) is a coordinated approach to pest control intended to prevent unacceptable levels of pests, while causing the least possible hazard to people, property, and the environment and using the most cost-effective means. School Integrated Pest Management could include pesticide operators, pesticide applicators, pesticide trainees, public applicators, and public trainees who use or supervise the use of pesticides on the campus of a school, as defined in ORS 634.700 and OAR 603-057-0500. IPM uses a combination of tactics, including sanitation, monitoring, habitat modification, and the judicious application of pesticides when absolutely necessary.
- b. IPM methods include:
 - i. Improved sanitation (e.g., removing food from desks, promptly cleaning spills in individual work areas, cleaning staff lounges and other areas where food is consumed, ensuring food trash is removed from building trash cans daily.)
 - ii. Inspection and monitoring of pest population sites
 - iii. Managing waste (e.g., keeping refuse in tight containers, locating waste containers away from building if possible)
 - iv. Maintaining structures (e.g., fixing leaking pipes promptly, sealing cracks, repairing damaged building siding to seal buildings)
 - v. Adding physical barriers to pest entry and movement (e.g., screens for chimneys, doors, crawlspace vents and windows; air curtains)
 - vi. Modifying habitats (e.g., removing clutter, relocating outside light fixtures)
 - vii. Using traps (e.g., light traps, snap traps, cage traps and glue boards)
 - viii. Using allowable pesticides judiciously
- c. An efficient IPM program will integrate pest management planning with preventive maintenance, housekeeping practices, landscaping, occupant education, and staff training.
- d. Pest Control
 - i. Pest control activities that depend upon the use of pesticides involve the storage, handling, and application of materials that can have serious health effects. Common construction, maintenance practices, and occupant activities provide pests with air, moisture, food, warmth, and shelter. Caulking or plastering cracks, crevices, or holes to prevent harborage behind walls can often be more effective than pesticide application at reducing pest populations to a practical minimum. Integrated Pest Management (IPM) is a low-cost approach to pest control based upon knowledge of the biology and behavior of pests. Adoption of an IPM program can significantly reduce the need for pesticides by

eliminating conditions that provide attractive habitats for pests. If an outside contractor is used for pest control, it is advisable to review the terms of the contract and include IPM principles where possible. The following items deserve particular attention.

- B. Schedule pesticide applications for unoccupied periods, if possible, so that the affected area can be flushed with ventilation air before occupants return. Pesticides should only be applied in targeted locations, with minimum treatment of exposed surfaces. They should be used in strict conformance with manufacturers' instructions and EPA labels. General periodic spraying may not be necessary. If occupants are to be present, they should be notified prior to the pesticide application. Particularly susceptible individuals could develop serious illness even though they are only minimally exposed.
- C. Select pesticides that are species specific and attempt to minimize toxicity for humans and non-target species. Ask contractors or vendors to provide EPA labels and MSDSs. Make sure that pesticides are stored and handled properly consistent with their EPA labels.
- D. Ventilation of areas where pesticides are applied: If only limited areas of the building are being treated, adjust the HVAC system so that it does not distribute contaminated air throughout the rest of the building. Consider using temporary exhaust systems to remove contaminants during the work. It may be necessary to modify HVAC system operation during and after pest control activities (e.g., running air handling units on 100% outdoor air for some period of time or running the system for several complete air exchanges before occupants re-enter the treated space).

17. Procedures for Responding to IAQ Complaints

- a. The procedure for responding to IAQ complaints is as follows:
 - i. IAQ problems are logged into the existing work-order system.
 - ii. Information is collected from complainants.
 - iii. Information and records that contain personally identifiable information or records related to worker's compensation claims are kept confidential.
 - iv. The capability of in-house staff to respond to complaints is assessed.
 - v. Appropriate outside sources of assistance are identified.
 - vi. Feedback is provided in a timely manner to the complainant.
 - vii. Remedial actions are taken.
 - viii. Remedial actions are followed-up to determine if the action has been effective.
 - ix. Building staff have been informed of these procedures.

- x. Building occupants have been informed of these procedures and are periodically reminded of how to locate responsible staff and how to submit a complaint.

18. Employee Training

- a. RCC employees and contract personnel whose functions could impact IAQ (e.g., custodial staff, maintenance employees) have been identified and trained.

19. Outdoor Air Quality

- a. In Oregon, the primary concern regarding outdoor air quality comes from the smoke generated by fires that are legal and intentionally set and by wildfires. During times where wildfire smoke is trapped in our region, the Facilities Department will monitor and minimize smoke as much as possible. Some buildings may be able to be better mitigated than others, however the Facilities Department will use tools and procedures that they can to assist.
- b. Using a Mask
 - i. When air is unhealthy, the best option is to reduce physical activity and stay indoors with windows/doors closed.
 - ii. Masks have limitations. Surgical gauze masks provide no protection from smoke.
 - iii. N95 respirator masks are designed for professional use by trained adults and have specific requirements under OSHA. The use of a N95 masks whether voluntarily or at the direction of the College must be coordinated in advance with the Risk Management Department
- c. Air Quality Index
 - i. RCC utilizes the AQI or Air Quality Index to determine level of activities and recommended next steps in the event the air quality deteriorates.
 - ii. Think of the AQI as a yardstick that runs from 0 to 500. The higher the AQI value, the greater the level of air pollution and the greater the health concern. To make it easier to understand, the AQI is divided into six levels of health concern: Each category corresponds to a different level of health concern:
 - B. Good. The AQI value for the RCC community is between 0 and 50. Air quality is satisfactory and poses little or no health risk.
 - C. Moderate. The AQI is between 51 and 100. Air quality is acceptable; however, pollution in this range may pose a moderate health concern for a very small number of individuals. People who are unusually sensitive to ozone or particle pollution may experience respiratory symptoms.

- D. Unhealthy for Sensitive Groups. When AQI values are between 101 and 150, members of sensitive groups may experience health effects, but the general public is unlikely to be affected.
 - E. Unhealthy. Everyone may begin to experience health effects when AQI values are between 151 and 200. Members of sensitive groups may experience more serious health effects.
 - F. Very Unhealthy. AQI values between 201 and 300 trigger a health alert, meaning everyone may experience more serious health effects.
 - G. Hazardous. AQI values over 300 trigger health warnings of emergency conditions. The entire population is even more likely to be affected by serious health effects.
- iii. When the outdoor AQI indicates air quality diminishes, RCC will follow guidance from local health authorities.