

Corporate Policy and Procedure



POLICY	Indoor Air Quality
CATEGORY	Health & Safety
AUTHORITY	All Workers
RELATED POLICIES	Incident Investigation and Reporting Policy Designated Substances Policy
APPROVED BY	Executive Team
EFFECTIVE DATE	January 1, 2017
REVISION DATE	June 1, 2019

Policy Statement

Guided by our corporate values, the City of Guelph is committed to achieving and maintaining acceptable air quality in buildings occupied by its workers. Indoor Air Quality (IAQ) has been shown to negatively impact the safety and health of workers in the workplace. For these reasons IAQ must be maintained at a level in compliance with established Industrial Regulations.

Purpose

The purpose of this Policy is to ensure workplace air quality is maintained at levels which do not pose a risk to worker Health & Safety.

Scope

This policy applies to all workers and workplaces where indoor air quality can be a concern in regard to worker health and/or safety

Background

Poor indoor air quality results from interactions with building materials and furnishings, activities within a building, climate control and building occupancy. IAQ problems may arise related to one or more of the following factors:

- Air temperature
- Improper or inadequate maintenance of Heating, Ventilation and Air Conditioning (HVAC) systems
- Low humidity – especially in heating season
- High dust levels
- Fibres from building materials such as fibreglass
- Presence of varying levels of chemical and/or biological contaminants.

- Presence of combustible gases
- High levels of Carbon Monoxide/Dioxide
- Insidious mould or other microbial contaminants from damp areas or where stagnant water can accumulate
- Presence of Volatile Organic Compounds (VOCs)
- Ozone from electrical equipment such as photocopiers
- Fragrance sensitivities and/or other bodily odours
- Occupancy load in a particular area and time spent indoors
- Poor housekeeping
- Improperly stored or disposal of waste materials
- Accumulation of radon gas

Indoor Air Quality can lead to individual discomfort. Common symptoms indicative of poor indoor air quality may include any of the following:

- Dryness and irritation of the eyes, nose, throat, and skin
- Headache
- Fatigue
- Shortness of breath
- Hypersensitivity and allergies
- Sinus congestion
- Coughing and sneezing
- Dizziness
- Nausea

People generally notice their symptoms after several hours at work and feel better after they have left the building or when they have been away from the building for a weekend or a vacation.

Many of these symptoms may also be caused by other health conditions including common colds or the flu, and are not necessarily due to poor IAQ. This fact can make identifying and resolving IAQ problems more difficult.

Definitions

Building Maintenance

The department with overall responsibility for maintenance and upkeep of a specific building.

Hazardous Materials

A biological, chemical or physical agent named or described in the regulations as a hazardous material

Indoor Air Quality

A term which refers to the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants

Industrial (or Occupational) Hygiene

The discipline of anticipating, recognizing, evaluating and controlling health hazards in the working environment with the objective of protecting worker health and well-being and safeguarding the community at large

Radon

A radioactive gas found naturally in the environment. This gas can prove harmful if it accumulates inside buildings.

Supervisor/Manager

A person who has charge of a workplace or authority over a worker

Worker

Means any of the following, but does not include an inmate of a correctional institution or like institution or facility who participates inside the institution or facility in a work project or rehabilitation program:

1. A person who performs work or supplies services for monetary compensation.
2. A secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized by the school board that operates the school in which the student is enrolled.
3. A person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university, private career college or other post-secondary institution.
4. Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation;

Responsibilities

Executive Team

- Ensure that service area leaders are aware of the content of this policy, and support the successful implementation of the requirements as laid down.

Building Maintenance

- Respond to calls related to indoor air quality concerns
- In conjunction with Health & Safety, contact an external industrial hygiene service provider to attend onsite and provide hygiene sampling services, when required
- Provide a report of any actions related to the complaint to Corporate Health & Safety, the supervisor/manager and the JHSC
- Ensure completion of any corrective or preventive actions arising from the investigation
- In the case of radon, be proactive and test all buildings proactively for the presence of radon, especially in basements and crawl spaces

Health & Safety

- Contact Building Maintenance to advise of any potential indoor air quality issues.

- Assist supervisors and/or Building Maintenance for investigation of indoor air quality concerns
- Assist in facilitation of industrial hygiene testing, when necessary
- Contact the Joint Health & Safety Committee (JHSC) to advise of the particulars of any hygiene testing, prior to the testing beginning.
- Provide a worker member of the JHSC an opportunity to be present for the start of testing.
- Ensure a copy of any reports, including testing results, are forwarded to the JHSC for review.

Joint Health & Safety Committee (JHSC)

- Receive information and be consulted about proposed testing strategies for industrial hygiene investigations
- Have a worker member present at the beginning of testing, where possible
- Receive reports regarding IAQ testing results.

Supervisor/Manager

- Respond to all concerns raised by workers into poor air quality or exposure to hazardous materials
- Contact Health & Safety for assistance to investigate the cause of worker concerns
- Take all relevant precautions in the circumstances to limit exposure to indoor air quality contaminants
- Ensure implementation of corrective actions to prevent recurrence

Workers

- Report concerns related to indoor air quality or exposure to hazardous materials, as soon as possible to immediate supervisor/manager
- Work with immediate supervisor/manager to complete the [INDOOR AIR QUALITY OBSERVATION SHEET](#)
- Ensure work areas are kept clean
- Report any damaged or malfunctioning equipment that could contribute to poor air quality (e.g. ventilation equipment)

Procedure

If a concern is identified regarding an Indoor Air Quality issue or an exposure to hazardous materials, the following steps must be followed:

1. Affected worker(s) contacts immediate supervisor/manager
2. The immediate supervisor/manager will investigate as soon as practicable to do so, and work with the worker to identify ways to control the issue, which may include but is not limited to the following:
 - Opening a door or window to the area.
 - Ensuring, where possible, indoor room or area temperature is maintained at a minimum of 20°C (68°F).
 - Arranging for any dormant water to be cleaned up or drained.
 - If a drain is the source of the concern, pouring a bucket of water into the drain to close/seal the drain elbow trap.

- Removing the worker from the area where the condition exists, or is perceived to exist.
 - Taking other immediate measures – within reason – to control the issue.
3. If the controls listed above are inadequate to solve the issue, or the problem persists, further action will be required, including the supervisor/manager, in conjunction with the worker(s), completing the [INDOOR AIR QUALITY OBSERVATION SHEET](#) and provide a copy to Health & Safety to assist with their investigation
 4. The immediate supervisor/manager will investigate with assistance from Health & Safety to ascertain possible causes.
 5. If industrial hygiene testing is required to determine occupational exposure, Health & Safety will assist the immediate supervisor and/or Building Maintenance to facilitate testing from an external contractor.
 6. Prior to the start of any industrial hygiene testing, Health & Safety will advise the Joint Health & Safety Committee (JHSC) of the proposed testing strategy, the reasons for the testing, and provide an opportunity for a JHSC worker member to be present at the start of the testing
 7. If possible, a walkthrough of the area should be carried out by Corporate Health & Safety and a worker member of the JHSC before testing begins
 8. At the conclusion of industrial hygiene testing, the external contractor will provide a report to Health & Safety and/or Building Maintenance. The report should include, at a minimum, the following information:
 - a. Nature of the complaint
 - b. What was discovered during a site evaluation
 - c. Results of hygiene testing performed
 - d. Suggested actions to remediate the issue
 - e. Credentials of the person/company completing the report.
 9. Health and Safety will forward a copy of the report, and proposed corrective actions to the JHSC, Department Manager and Building Maintenance for review.
 10. Building Maintenance will implement corrective or preventive actions to prevent recurrence of the issue in buildings maintained by them, in other buildings this will be the responsibility of the supervisor/manager.
 11. Supervisor/Manager completes an Incident Report and forwards to Health & Safety.

Reference Documents

ASHRAE Standard 62.1-2013 - Ventilation for Acceptable Indoor Air Quality

Occupational Health & Safety Act, R.S.O. 1990, c. O.1

Revision History

Document Owner	Issue / Revised Date	Reason For Changes
Health & Safety	November 1, 2016	Initial draft
Health & Safety	June 1, 2019	Minor wording changes

Appendix A - Indoor Air Quality Observation Sheet

Date		Time	am ___ pm ___
Department		Specific Location	
Worker Name		Contact Number	
Supervisor Name		Contact Number	

1 PEOPLE

Has anyone stated, "The air feels stale?"	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Has anyone stated "I feel lousy?"	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Do people feel better when they leave the area/building?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Do people feel tired/sleepy in mid – late afternoon?	Yes ___	No ___	If yes, call Corporate Building Maintenance.

2. AREA

Are there damp/wet patches or mould in the wall or ceiling?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Are there damp/wet areas on furniture, rugs, curtains/blinds?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Are there chemical in use or stored in the area?	Yes ___	No ___	Store in sealed proper locations.
Are there waste materials in the area?	Yes ___	No ___	Store in sealed proper locations.
Are there areas of exposed insulation?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Is there construction in the immediate or local area? (Within 1 block?)	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Has the area been cleaned in the last week?	Yes ___	No ___	If no, arrange for thorough cleaning.
Is the humidity level set at a minimum of 40%?	Yes ___	No ___	If no, call Corporate Building Maintenance
Is there a more than normal accumulation of dust?	Yes ___	No ___	If yes, arrange for cleaning to be done.
Is the room temperature showing a minimum of 68 F or 20 C?	Yes ___	No ___	If no, call Corporate Building Maintenance
Is there fresh air into the room?	Yes ___	No ___	If no, call Corporate Building Maintenance
Is there air movement out of the room?	Yes ___	No ___	If no, call Corporate Building Maintenance
Is there evidence of mould or other microbial contaminants?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Is there a Carbon Monoxide and/or a Carbon Dioxide alarm in the area. Is it alarming?	Yes ___	No ___	If yes, call Corporate Building Maintenance and leave the area immediately.

3. ROOM

Is this a closed office area or open office area?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
If an open Office area, are divider screens in use?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Do the screens contact the floor?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
How old do the screens appear?	New ___	Old ___	If old, call Corporate Building Maintenance.
Are the screens new to the area?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Are there potted plants in the area/office?	Yes ___	No ___	If yes, remove them.

Are the signs of mould/growth on the plants or in the pots and soil?	Yes ___	No ___	If yes, remove them.
Are there wet/dirty mops in the room or area?	Yes ___	No ___	If yes, remove them.
Are there new carpets or other furnishings in the room or area?	Yes ___	No ___	
Other:	Yes ___	No ___	

4. HEATING VACUUM AIR CONDITIONING: (HVAC)

Is there fresh air into the room/area from HVAC?	Yes ___	No ___	If no, call Corporate Building Maintenance.
Is there air movement out of the room/area via the HVAC?	Yes ___	No ___	If no, call Corporate Building Maintenance.
Is the visible HVAC vent and surrounding area clean?	Yes ___	No ___	If no, call Corporate Building Maintenance.
Is the HVAC system blocked by paper, furniture or anything?	Yes ___	No ___	If yes, remove obstruction.

5. PLUMBING

Is there a floor drain or trap in the area?	Yes ___	No ___	
Is the floor drain or trap clear of any obstruction?	Yes ___	No ___	If yes, clear the obstruction
Is the floor drain or trap plugged/blocked?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Is there a smell coming from the floor drain or trap?	Yes ___	No ___	If yes, pour a bucket of water into it.
Is there a sink in the area?	Yes ___	No ___	
Is it empty?	Yes ___	No ___	If no, empty the sink
Is it plugged/blocked?	Yes ___	No ___	If yes, call Corporate Building Maintenance
Is there a leaking pipe/tap or valve?	Yes ___	No ___	If yes, call Corporate Building Maintenance.
Is there an overflow from a sink or pail?	Yes ___	No ___	If yes, drain the sink/pale.
Other:	Yes ___	No ___	

6. OTHER

Please enter any other observations related to this issue:

SEND COMPLETED INFORMATION SHEET TO CORPORATE BUILDING MAINTENANCE