YORK UNIVERSITY

INDOOR AIR QUALITY PROGRAM

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Occupational Health and Safety

Revised: October 2013
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Glossary

OHS - Occupational Health and Safety
CSBO - Campus Services and Business Operations
HSO - Health and Safety Officer
IAQ - Indoor Air Quality
JHSC - Joint Health and Safety Committee

I. Objectives:
The objectives for the establishment of the York University Indoor Air Quality Program are:

1. To determine the quality of the indoor air in the working environment and to make recommendations where necessary for improvement;

2. To prevent illness, injury and relief of adverse health symptoms through provision and maintenance of safe healthy working conditions inside University buildings; and

3. To comply with legislated requirements and the Ontario Ministry of Labour guidelines for indoor air quality.

II. Standards for Indoor Air Quality:

The Ontario Ministry of Labour guidelines for indoor air quality (Appendix III) and those standards to which these guidelines refer (e.g. the American Society of Heating, Refrigerating and Air-Conditioning Engineers standard, the Canadian Standard Association standards etc.) will be followed for all cases of indoor air quality concerns at York University.
III. Reporting and Response Procedure

a. Reporting Procedure for Indoor Air Quality Concerns:

i) Occupant identifies indoor air quality problem (e.g. temperature, relative humidity, lack of ventilation).

ii) Occupant reports to immediate supervisor.

iii) Supervisor investigates.

(a) If both agree there is an air quality problem, the supervisor takes corrective action by contacting CSBO for repair or maintenance, and/or where source of problem is unknown, contact Occupational Health and Safety (OHS) for investigation.

(b) If supervisor and worker disagree the worker notifies the JHSC worker member or OHS.

(c) If worker suffers ill effects the Supervisor’s Accident Investigation report is to be initiated (refer to Accident Investigation Program).

b. Responses to Indoor Air Quality Concerns:

i) Responses to Indoor Air Quality Concerns by OHS

1. OHS initiates internal indoor air quality complaint investigation procedure (appendix I, part a) within 14 days.

2. OHS prepares and distributes report to supervisor of the area, CSBO and the appropriate Joint Health and Safety Committee.

ii) Responses to Indoor Air Quality Concerns by CSBO -

1. Occupant or department supervisor initiates work order or service request through dispatcher at ext. 22401 or online,

2. CSBO staff investigates at site,

3. CSBO corrects the problem or consults OHS for advice.

iii) Responses to Indoor Air Quality Concerns by JHSC member

1. JHSC member investigates;
2. Requests that area supervisor take corrective action where considered necessary; and

3. Reports back to JHSC at the next Committee's meeting.

c) Notification Procedure for Ventilation System Changes

1. Notification

Any changes to the ventilation system (e.g. shut down for repair), which could affect the indoor air quality should be communicated to the occupants in the area by the following routes:

CSBO notifies \rightarrow\text{Department authorities}^2 \rightarrow\text{Supervisors of areas} \rightarrow\text{Occupants}

Superintendent Central Utilities
Security Control Centre
OHS Hygienist

^2\text{Department authorities = Directors, Executive Officers, Supervisors or HSOs will notify the occupants.}

2. Consultation and Recommendation

CSBO will consult with Occupational Health and Safety on any changes to the ventilation system, which may affect the health and safety of the workers or occupants. Occupational Health and Safety, if necessary, will provide recommendations.

d) Indoor Air Quality Investigation/Testing report distribution:

Copies of the written report should be sent to:

1. the reporting occupant,
2. the supervisor of the area,
3. the appropriate JHSC
5. Area Executive Officer and/or area HSO

IV. Roles and Responsibilities Relative to IAQ

OHS Director

♦ Provides advice and consults with the community,
♦ Liases with the Ministry of Labour.
OHS Occupational Hygienists
- Provide technical expertise, e.g., IAQ investigation and testing,
- Provide advice and counsel.

OHS Administrative Support
- Provides administrative assistance to the JHSC,
- Provides advice and counsel.

Joint Health and Safety Committee
- Review all Supervisor Accident Investigation Reports (SAIR)
- Review all Indoor Air Quality Reports.

Worker Members
- Investigate workplace accident/incident, occupational illness,
- Attend occupational hygiene testing, (optional)
- Consult on corrective actions to reduce/eliminate workplace hazards.
- Inspect workplace

Certified Members
- Can order work stoppage if dangerous circumstances exist.

Department Heads/Executive Officers/HSO
- Ensures supervisors are knowledgeable about their legislated duties and responsibilities under the OHS Act.
- Receive and review copies of JHSC minutes and SAIRs.
- Take actions to eliminate or reduce hazards and to address potential health and safety concerns.

Supervisors/HSO
- Investigates Indoor Air Quality concerns,
- Address and/or correct workplace hazards or potential health and safety concerns,
- Implement/respond to recommendations.
- Complete SAIRs as per the Accident Investigation Program.

Workers
- Report Indoor Air Quality concerns to their supervisors.
- Report workplace hazards or potential health and safety concerns to their supervisors.

V. Assessment

The indoor air quality investigation procedure (Appendix 1) will be followed upon receipt of an indoor air quality concern by OHS. The investigation procedure consists of 2 parts: Part A and B.
**Part A involves:**

1. OHS hygienist completes "Initial Indoor Air Quality Questionnaire” - See Appendix I (2).

   This questionnaire will be completed by the hygienist for the purpose of collecting information on the complainant's concern, health symptoms and the work environment of the worker. This information will assist the hygienist to decide what industrial hygiene testing equipment to bring on site for preliminary environmental testing and a general understanding of the problem.

2. Preliminary environmental testing and site assessment.

3. "Ventilation Checklist" – See Appendix I (3)

   If the concern is related to the ventilation system, a "Ventilation Checklist" may be required to be completed by CSBO upon request by the hygienist. Completion of the checklist will provide information on the current condition of the ventilation system in the problem area.

4. "Building Checklist" – See Appendix I (4)

   If necessary, the "Building Checklist" will be completed by the hygienist to help identify other pollutant sources that could be generated in the building.

5. "Complaint Area Observation Sheet" – See Appendix I (5)

   A "Complaint Area Observation Sheet" may be completed by the complainant's supervisor or occupational hygienist on the site. Completion of this checklist will assist the investigator to perform a thorough inspection for possible indoor contaminants.

6. “Indoor Air Quality Investigation checklist for Photocopier Rooms” – See Appendix I (6)

   Where the Indoor Air Quality concern related to a photocopier room, the “Indoor Air Quality Investigation checklist for Photocopier Rooms” will be completed by the hygienist.

**Part B - " In-depth IAQ Questionnaire"**

Part B of the investigation procedure involves the completion of an "In-depth IAQ Questionnaire" by the occupants. This part will only be initiated after corrective action recommended in Part A has been carried out and found to be unsuccessful in relieving the health symptoms of the occupants. An external consultant maybe used where required.
VI. Engineering Controls

Engineering controls are the first preventative measures to be considered in the control of airborne indoor air contaminants.

1. Application

Engineering controls can be applied to:
- the ventilation system e.g. modification of existing system, use of charcoal filters etc.
- control of chemical contaminants and bioaerosols, e.g. by substitution, installation of local exhaust etc.
- the work environment, e.g. more frequent cleaning, ergonomic assessment of workstation etc.

2. Maintenance of the HVAC (Heating, Ventilation and Air Conditioning) system

The HVAC system will be maintained by CSBO. Request for maintenance work can be initiated by contacting the dispatcher at 22401. The following parts or equipment of the HVAC should be regularly checked and maintained by CSBO:
- bird screen
- air filters
- dampers on main system
- lubrication of rotating equipment
- fumehood and exhaust hood performance

3. Consideration to ventilation adequacy and temperature control should be given whenever an area renovation is undertaken such as subdividing a space into smaller rooms.