

#### **INDOOR AIR QUALITY**

#### **POLICY STATEMENT 451**

Category: Finance and Administration

AUTHORITY: Education Act, Section 28(2)(c); NB Reg.

ional

Nov. 12, 1998

97-150, Section 25(1)(f); Occupational Health and Safety Act

RESPONSIBILITY: Director of Finance and Administration

**REVISED:** 

EFFECTIVE:

August 10, 2018

Facilities Manager

Principal

#### **Policy Statement**

The Superintendency shall ensure that the indoor air quality of all buildings is maintained to accepted standards and shall ensure that all concerns regarding air quality are handled quickly and effectively.

The Principal shall ensure that all air quality complaints are handled in accordance with the ASDE Indoor Air Quality Guidelines (Appendix A).



#### **Initial Process**

All complaints submitted for action must be in writing. By doing so the complaint can be recorded and not lost in the confusion of a busy administration. The "Information Form - Staff/Student - Environment Complaint" (Form AQ1) should be completed and given to the principal. The principal shall take action on issues within his/her authority (cleanliness, routine maintenance) or will forward, on issues beyond his or her jurisdiction, the complaint form to the Director of Finance and Administration to initiate the investigative process.

#### Responsibilities

#### A) Principal

- To assume or assign overall responsibility for cleanliness of the building.
- To act on all indoor air environment complaints.
- Handle day to day indoor air environment problems on an informal basis, considering common causes listed in Appendix "A".
- Document complaints of a chronic or more serious nature.
- Advise school Health and Safety Committee.
- Document all remedial action taken on chronic or serious problems.
- Seek assistance where required.

#### B) Teachers

- Tracking attendance of pupils in an effort to determine if absence is related to air quality, cleanliness, or classroom environment.
- Report problems of cleanliness to principal.
- Keep room uncluttered.
- Plants and pets are to be kept to an absolute minimum.
- Composters and recyclables not to be kept in classrooms

#### C) Maintenance Department

- Regularly inspect the heating and ventilation systems and maintain a register outlining frequency of inspection and adequacy of operation.
- Carry out preventative maintenance on a regular basis.
- Ensure trained staff are available to address routine problems.
- Respond, in writing, to any written complaints received.
- Carry out remedial action where warranted and consistent with budget and resource availability.
- Where remedial action is warranted and resources are not available, prepare a report of the situation and present to Senior Management.

#### D) Senior Management

Act on documented complaints presented by the Director of Finance and Administration,
 Facilities Department, School Principal, and/or other legitimate sources.

#### Procedure

#### A) Principal

- 1) The Principal is responsible for dealing with indoor air environment complaints in a systematic manner.
  - a) The complainant(s) should be interviewed to determine the nature of the complaints and other relevant information.
  - b) The complainant(s) should be kept informed of the steps being taken to address their complaints and be informed of the final disposition.
  - c) Comments attributed to or received from physicians attributing the symptoms to air quality should be in written form.
- 2) Attempt to resolve problems immediately on site. Consider opening windows and doors, moving class, and/or suggest more appropriate apparel. Conduct on site investigation (complete Form AQ2) and have qualified site custodial staff check systems, etc. (complete Form AQ3).
- 3) Seek assistance from Facilities Department when the problem cannot be resolved on site.
- 4) Advise school Health and Safety Committee and seek assistance.
- 5) If problem serious or chronic, the principal should:
  - a) Prepare detailed documentation of the problem.
  - b) Forward documentation on problem to the Director of Finance and Administration and a copy to the Facilities Manager.
- 6) If a problem cannot be resolved in a timely manner, or if a plan of action is not considered satisfactory, then all documentation, along with covering memo, is to be sent to the Director of Finance and Administration with copies to the Superintendent and the Facilities Manager.
- 7) The Principal will use discretion in discussing indoor air environment problems with students, staff, parents and the general public.
- 8) In exceptional cases where the media wish to become involved, direct all communication through the Superintendent. The principal WILL NOT deal with the media on any air environment concerns.

#### B) Facilities Department

- 1) Carry out normal preventative maintenance in accordance with standard practice.
- 2) Carry out routine demand maintenance requests in accordance with regular procedures.
- 3) Where a written complaint (Form AQ1) is received in accordance with this policy investigate the matter, review principal's reports AQ2 and AQ3, and respond in writing upon the completion of the investigation.
- 4) Carry out any measures determined necessary as per (3) above, in the time frame recommended. This includes recommending to the Director of Finance and Administration for sampling and for testing by Department of Education and Department of Supply and Services as deemed necessary.
- 5) The Director of Finance and Administration will follow up with Maintenance staff to ensure measures decided upon in (3) above have been completed.
- 6) Act on directives from regulatory agencies (Dept. of Health, Fire Marshall, Dept. of Labour, etc.)
- 7) The Director of Finance and Administration will provide information to Senior Administration, as necessary, and carry out additional work as agreed.
- 8) Discuss with the Principal any maintenance/repair measures which may alter the school environment.

#### C) Director of Finance and Administration

- 1) Review information received from the Principal or Facilities Department
- 2) Arrange for remedial work through Facilities Department, as required.
- 3) Recommend to the Superintendent that the Department of Education and Department of Supply and Services be contacted requesting testing and sampling.
- 4) Follow up on problem to resolution.
- 5) Seek necessary funding to promote and maintain cleanliness and acceptable air quality.

#### D) Outside Agencies

1) When called in, outside agencies will deal with the Superintendent in consultation with principal and Facilities Manager.

- 2) Assistance will be given by the Department of Education, initially to review the systems, all pertinent information, and if necessary, to forward the request for air quality testing to Technical Services Branch, department of Supply and Services.
- 3) The outside agency will recommend remedial action or determine action for subsequent analyses.
- 4) Issue enforcement action where necessary.

#### E) Senior Administration

- 1) Obtain additional information and/or convene meeting with the parties involved in response to item (6) of Principals' procedure.
- 2) Senior Administration will respond in writing to the parties involved, in response to item (6) of the Principals' procedure.
- 3) On the advice of the Director of Finance and Administration contact the Department of Education requesting testing and sampling by the Department of Supply and Services.
- 4) Refer issues of a medical nature to the Department of Health.
- 5) Any extraordinary expenditures must be addressed in terms of budget allocation.
- 6) Should the media become involved, all communication will be handled by the Superintendent or his/her designate.
- 7) Should extended school closure be considered, a meeting will be convened involving the Superintendent, the Director of Finance and Administration, the School Principal, and others as required. An action plan will be drawn up, preferably prior to a directive that the school be closed, in order to accommodate all students and staff and avoid loss of instructional time.

### Appendix A

# FACTORS AND SOURCES AFFECTING INDOOR AIR QUALITY AND COMFORT

FACTORS	SOURCE
Temperature and humidity extremes	Improper placement of thermostats, poor humidity control, inability of the building to compensate for climate extremes, tenant- added office equipment and processes.
Carbon dioxide	People, combustion of fossil fuels (eg: gas and oil furnaces and heaters).
Carbon monoxide	Automobile exhaust (garages, loading docks, air intakes), combustion, tobacco smoke.
Formaldehyde	Unsealed plywood or particleboard, urea formaldehyde foam insulation, fabrics, glues, carpets, furnishings, carbonless copy paper.
Particulates	Smoke, air inlets, paper, duct insulation, water residue, carpets, HVAC filters.
Volatile organic compounds (VOCS)	Copying and printing machines, computers, carpets, furnishings, cleaning materials, smoke, paints, adhesives, caulking, perfumes, hairsprays, solvents.
Inadequate ventilation (insufficient outside air, insufficient airflow, inadequate circulation)	Energy-saving and maintenance measures, improper system design or operation, occupant tampering with HVAC system, poor office layout.
Microbial matter	Stagnant water in HVAC system, wet and damp materials, humidifiers, condensate drain pans, water towers
Classroom contents	Plants, composters, pets, and recyclables.

# Form AQ1 Information Form - Staff/Student Environment Complaint (Report to be completed by principal or Vice-Principal)

SCHOOL:			
Complainant:			
Affected Person:	Kelation:	Date of incident:	
Room(s) where incident occurred: Teacher(s) present in the room(s) of inc			
Number of students present in the room	n(s):		
Were the windows open?	Was the	neat on?	
Were there other previous complaints a	bout this/these roc	m(s)?	
Time when symptoms were first experie	enced:		
Frequency of symptoms:			
Specific times or circumstances that ma			
When symptoms go away:			
Signature of Principal:		Date:	

## Form AQ2 Monitoring the Indoor Air Environment

(To be completed by principal or Vice-Principal)

SCHOOL:					
SIGNATURE of PRINCIPAL:					
Date:	Time:	Cla	assroom(s)	#:	
Reported by:		Complainant same:		or	
Attach Form AQ1 Environm	ent Complaint	Form			
A) Building Conditions					
Class: Offic	e:	Other:			
Windows: Closed:	Percent	Open:	_ Full Open	:	
Drapes: Nil: Clo	sed:	Percent Open:		Full Open: _	
Number of students/people	e in the room: _				
Fresh Air Outlet: Noticeabl	e air flow? (Y/N	I): Clear o	of Obstructi	ons? (Y/N):	
Is there an indication of exc	essive dust on	the outlet?			
Are there indications of dar	mpness?	Dryness? _			
What is the thermostat rea	ding?	degrees Celsius			
Is there excessive noise? _					
Floor covering: Carpet:	Tile:	Hardwood:	_ Concrete:	Oth	ner:
Presence of Plants (Y/N):		Animals (Y/N):			
Source of Space Heating: O	il:	Electric:			

B) Climatic Conditions	
Time:AM/PM Outside Air Temperature:degree	es Celsius
Relative Humidity:	
Wind: Nil:Light: Moderate: Strong:	_
Direction: N S E W Precipitation: Nil:Light: Heavy:Rain: _ Snow	: <u></u>
C) Other Factors (Consider both indoor and outdoor)	
Unusual Activity (i.e.: lab experiment etc.):	
Painting, roofing, spraying, etc.?	
Is the window blocked or subject to vehicle exhaust?	
Is there machinery in or near the room (i.e.: duplicator, copier, etc.)?	
D) Renovations or Operating Changes (any major changes made in the last two	years)
Descriptions of changes in layout:	Date:

Descriptions of major repairs:	Date:
Descriptions of decorative renovations (eg: carpeting, paint etc.):	Date:
Descriptions of new equipment (e.g. photocopier, printer, etc.):	Date:
ACTION TAKEN:	

RESULTS OF ACTIONS:	
ACTION TO BE CARRIED OUT:	
Recommendations of school administration:	
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Recommendations of District Maintenance:	
Recommendations of district infantenance.	

## FORM AQ3

# MONITORING THE INDOOR AIR ENVIRONMENT (GENERAL REQUIREMENTS TO BE COMPLETED BY CUSTODIAL STAFF)

SCHOOL:	DATE LAST CHECKED:
SIGNATURE OF CUSTODIAN:	
Is the supply air duct unobstructed?	
Were the thermostats calibrated lately?	
Last time the air filters were changed:	
Are all dampers operating, and in correct sequence	re?

Are all duct heaters operating, and in sequence?
Last time the air exchange coils were cleaned:
Is there stagnant water in or around the vent system?
What is the building heating/ventilation strategy?
Have floor drain traps been filled with water?
Are fresh air and exhaust separated by five (5) meters?