

# Employer Duties to Protect Workers from Wildfire Smoke – Know the Laws of Your Province



Employers have an implied duty to manage the hazards of wildfire smoke at the workplace

Although smoke from wildfires is a perennial hazard all across Canada, OHS regulations don't specifically address what employers must do to protect workers against the dangers of smoke inhalation. That doesn't mean that smoke protection duties don't exist; it just means that they're implied. There are 4 potential sources of such implied duties:

- The part of the OHS Act called the general duty clause that requires employers to take reasonable measures to prevent and control foreseeable hazards in the workplace, even if they're not mentioned in the OHS regulations (all jurisdictions);
- The sections of the OHS regulations requiring employers to protect workers from exposures to airborne contaminants, including those contained in wildfire smoke, at or above the specified occupational exposure limit (OEL) for that particular substance (all jurisdictions);
- The OHS regulatory requirement that employers ensure that the air of indoor workplaces is adequately ventilated (all jurisdictions); and
- The duty of employers to allow and investigate complaints about indoor air quality (Fed and BC).

Note that the latter 2 of these duties pertain only to **indoor** air quality and thus don't protect workers who work outdoors. Since all jurisdictions have general duty clauses and OEL requirements, here's a look at the other language under which the duty to prevent harmful exposure to wildfire smoke may be implied.

In addition to the below regulatory requirements, the OHS Act of all jurisdictions includes a general duty clause requiring employers to prevent recognized and foreseeable workplace hazards that aren't expressly addressed in the OHS regulations.

# Wildfire Smoke Hazards & General OHS Air Quality Requirements

## FEDERAL

1. Employer must develop, or appoint a qualified person to develop, a procedure for investigating situations in which the health or safety of an employee in the work place is or may be endangered by the air quality;
2. Procedure must include: (a) a review of the nature and number of health or safety complaints; (b) a visual inspection of the work place; (c) the inspection of the HVAC system for cleanliness, operation and performance; (d) a review of the maintenance schedule for the HVAC system; (e) the assessment of building use as compared to the use for which it was designed; (f) the assessment of actual level of occupancy as compared to the level for which the building was designed; (g) the determination of potential sources of contaminants; (h) the determination of levels of carbon dioxide, carbon monoxide, temperature, humidity and air motion, where necessary; (i) the specification, where necessary, of tests to be conducted to determine levels of formaldehyde, particulates, airborne fungi and volatile organic compounds; and (j) the identification of the standards or guidelines to be used in evaluating test results;
3. In developing the investigation procedure, the employer or qualified person appointed by the employer must take into account the Department of Health publication 93-EHD-166, entitled *Indoor Air Quality in Office Buildings: A Technical Guide*;
4. If the health or safety of an employee in a work place is or may be endangered by the air quality, the employer must, without delay, appoint a qualified person to carry out an investigation in accordance with the above procedure, in consultation with the workplace JHSC or health and safety representative;
5. If feasible, the employer must, in consultation with the JHSC or health and safety representative, remove or control any health or safety hazard identified in the investigation;
6. Employer must keep the records of every IAQ complaint and investigation for at least 5 years; and
7. Employer must post in a place readily accessible to every employee the telephone number of a contact person to whom health or safety concerns regarding the indoor air quality in the work place can be directed (*COHS Regs.*, Secs. 2.26 and 2.27)

## ALBERTA

Employer must protect workers against exposure to airborne contaminants at harmful levels of concentration (*OHS Code*, Sec. 16)

## BRITISH COLUMBIA

1. Employer must ensure that the IAQ is investigated when: (a) complaints are reported, (b) occupancy in the space changes substantially, or (c)

renovations involving significant changes to the ventilation system occur; and

2. IAQ investigation must include: (a) assessment of the ventilation rate, unless the indoor carbon dioxide level is less than 650 ppm above ambient outdoor levels, (b) inspection of the ventilation system, (c) sampling for airborne contaminants suspected to be present in concentrations associated with the reported complaints, and (d) a record of the complaint, the findings of the investigation, and any actions taken (*OHS Reg.*, Sec. 4.79)

## **MANITOBA**

Employer must, as much as is reasonably practicable, ensure that: (a) a workplace has appropriate air quality and is adequately ventilated; and (b) contaminants and impurities are prevented from accumulating in the air at a workplace (*WSH Regs.*, Sec. 4.1)

## **NEW BRUNSWICK**

1. Employer must ensure that a place of employment is adequately ventilated by either: (a) natural ventilation which introduces outside air provided by openings having a combined area equal to at least 5% of the floor area; or (b) mechanical ventilation that meets ASHRAE 62-1989, *Ventilation for Acceptable Indoor Air Quality*, including the supply rates of required outside air; and
2. If but there is no specified rate, employer must ensure that a minimum of 8 litres/second/person of outside air is introduced (*OHS General Reg.*, Sec. 20)

## **NEWFOUNDLAND**

Employer must ensure that: (a) there's appropriate circulation of clean and wholesome air, (b) there's adequate ventilation, and (c) impurities are made harmless and inoffensive in a workplace in accordance with standards established by ASHRAE and ACGIH (*OHS Regs.*, Sec. 45(1))

## **NOVA SCOTIA**

Employer must provide for a supply of fresh air into, and the removal of air from, a workplace or part of a workplace, so far as is reasonably practicable, sufficient to: (a) keep the air reasonably pure, and (b) render harmless all gases, vapours, dust or other impurities that are likely to endanger the health or safety of any person in the workplace (*Occupational Safety General Regs.*, Sec. 15(a))

## **ONTARIO**

An industrial establishment must be adequately ventilated by either natural or

mechanical means so that the atmosphere doesn't endanger the health and safety of workers (*OHS Industrial Establishment Regs*, Sec. 127)

## **PRINCE EDWARD ISLAND**

Employer must ensure that the workplace is adequately ventilated by either natural or mechanical means so that the atmosphere doesn't endanger the health and safety of employees under normal working conditions (*OHS Act General Regs*, Sec. 11.1)

## **QUÉBEC**

Air quality requirements of *OHS Regulation* are limited to situations where hazardous atmospheres may exist, such as those containing airborne or biological contaminants above OELs, and don't address general IAQ issues in offices and other general workplace settings not involving exposure to hazardous atmospheres.

## **SASKATCHEWAN**

Employer, contractor or owner must: (a) ensure the adequate ventilation of a place of employment, and (b) to the extent reasonably practicable, render harmless and inoffensive, and prevent the accumulation of, any contaminants or impurities in the air by providing an adequate supply of clean and wholesome air and maintaining its circulation throughout the place of employment (*OHS Regs.*, Sec. 6-2).

## **NORTHWEST TERRITORIES & NUNAVUT**

Employer must: (a) ensure the adequate ventilation of a work site, and (b) to the extent reasonably possible, render harmless, and prevent the accumulation of, any contaminants or impurities in the air by providing an adequate supply of clean and wholesome air and maintaining its circulation throughout the work site (*OHS Regs.*, Sec. 69)

## **YUKON**

The air quality and ventilation requirements contained in the *OHS Regs.* are limited to situations where ventilation systems are used to control hazardous atmospheres, such as those containing airborne or biological contaminants above OELs, and don't address general IAQ issues in offices and other general workplace settings not involving exposure to hazardous atmospheres.