

PART 36

CHEMICAL AND BIOLOGICAL SUBSTANCES

APPLICATION

Application

36.1 This Part applies to every workplace in which a chemical or biological substance is present.

ASSESSMENTS

Duty to assess chemical and biological substances

36.2(1) An employer must assess all information that is practicably available to the employer respecting a chemical or biological substance present in the workplace to determine if the substance creates or may create a risk to the safety or health of a worker in the workplace. The assessment must take place in consultation with

- (a) the committee at the workplace;
- (b) the representative at the workplace; or
- (c) when there is no committee or representative, the workers at the workplace.

36.2(2) An employer must reassess a chemical or biological substance in accordance with the requirements of subsection (1) if

- (a) there is a change
 - (i) in conditions in the workplace, or
 - (ii) in the health or physical condition of a worker known to the employer; or
- (b) new information about the substance becomes available to the employer.

SAFE WORK PROCEDURES

Safe work procedures

36.3 An employer must

(a) develop and implement safe work procedures respecting the use, production, storage, handling and disposal of any chemical or biological substance that an assessment under section 36.2 has determined creates or may create a risk to the safety or health of a worker in that workplace;

(b) train workers in the safe work procedures; and

(c) ensure that workers comply with the safe work procedures.

CONTROL MEASURES FOR NON-AIRBORNE HAZARDS

Control measures for non-airborne hazards

36.4 If an assessment under section 36.2 determines that non-airborne exposure to a chemical or biological substance creates or may create a risk to the safety or health of a worker, an employer must immediately implement control measures in the workplace to eliminate any risk resulting from non-airborne exposure to the substance.

OCCUPATIONAL EXPOSURE LIMITS FOR AIRBORNE HAZARDOUS SUBSTANCES

Establishing airborne occupational exposure limits

36.5(1) Subject to subsection (2), if an assessment under section 36.2 determines that the presence of an airborne chemical or biological substance in the workplace creates or may create a risk to the safety or health of a worker, an employer must

(a) in the case of an airborne substance for which the ACGIH has established a threshold limit value, establish an occupational exposure limit for the substance that does not exceed the threshold limit value established by the ACGIH;

(b) in the case of an airborne designated material, establish an occupational exposure limit for the material that is as close to zero as possible and does not exceed the threshold limit value established by the

ACGIH, where one exists; or

(c) in the case of an airborne substance for which the ACGIH has not established a threshold limit value,

(i) implement control measures in the workplace sufficient to eliminate any risk to the safety or health of a worker, or

(ii) ensure that a competent person establishes an occupational exposure limit for the substance that will ensure that the safety or health of all workers in the workplace will not be placed at risk.

36.5(2) When exposure to an airborne chemical or biological substance at a concentration below the threshold limit value for that substance established by the ACGIH creates or may create a risk to the safety or health of a worker in a workplace due to

(a) conditions in the workplace, including,

(i) heat,

(ii) ultraviolet and ionizing radiation,

(iii) humidity,

(iv) pressure,

(v) length of work shift, work-rest regime, or

(vi) additive and synergistic effects of materials and workload; or

(b) the health or physical condition of a worker in the workplace known to an employer;

the employer must establish a lower occupational exposure limit for that substance than the limit established by the ACGIH. The occupational exposure limit established by the employer must ensure that the safety or health of workers who are exposed to the substance in that workplace at levels below that limit will not be placed at risk.

MONITORING AND CONTROL MEASURES

Monitoring

36.6(1) If a worker is, or may be, exposed to an airborne chemical or biological substance in the workplace at a concentration in excess of the occupational exposure limit for the substance established under section 36.5, an employer must

(a) conduct monitoring of the substance on a regular basis to determine the airborne concentration of the substance; or

(b) implement control measures in accordance with section 36.7 sufficient to ensure that no worker is exposed to the substance in excess of the occupational exposure limit for that substance.

36.6(2) When an employer conducts monitoring under subsection (1), the employer must ensure that

(a) the concentrations of the chemical or biological substance to which a worker is exposed are determined by a competent person from analyses of air samples representative of the worker's exposure; and

(b) the air sampling and the analyses of the air samples are conducted in accordance with the requirements of

(i) the National Institute for Occupational Safety and Health *Manual of Analytical Methods*, published by the United States Department of Health and Human Services, or

(ii) another method established by a recognized occupational hygiene practice.

36.6(3) An employer must make a record of all monitoring, which must include the following information:

(a) the type of monitoring;

(b) the type of equipment used;

(c) each result of the monitoring and the time each result was obtained;

(d) any interpretation of the monitoring data;

(e) the names of the workers whose exposure was measured.

36.6(4) An employer must provide the monitoring records to

- (a) the committee at the workplace;
- (b) the representative at the workplace;
- (c) if no committee or representative exist, to affected workers; and
- (d) upon request, to a worker who was exposed to a chemical or biological substance in the workplace.

36.6(5) An employer must maintain a monitoring record for a 30-year period after the monitoring was conducted.

Control measures

36.7 When monitoring under section 36.6 indicates that a worker has been exposed to an airborne chemical or biological substance at a concentration in excess of the occupational exposure limit established for the substance, an employer must implement control measures in the workplace sufficient to ensure that the exposure of the worker to the chemical or biological substance does not exceed the occupational exposure limit in the future.

Monitoring after control measures implemented

36.8 When an employer implements control measures to control the concentration of an airborne chemical or biological substance, the employer must monitor the concentration of the substance in the workplace for a period sufficient to determine that the control measures have reduced the concentration of the substance below the occupational exposure limit for the substance.

Personal protective equipment

36.9(1) When an employer is required to implement control measures under this Part to control a worker's exposure to an airborne chemical or biological substance, the control measures must not include a requirement for a worker to wear or use personal protective equipment to prevent or reduce exposure to a chemical or biological substance unless no other measure is reasonably practicable.

36.9(2) Any personal protective equipment required under subsection (1), including respiratory protective equipment, must meet the requirements of Part 6 (Personal Protective Equipment).

Definitions

36.10 The following definitions apply in this Part.

"**control measure**" means a measure used to prevent or reduce exposure of a worker to a chemical or biological substance and may

include substitution of materials, work practice controls, engineering controls or the use of personal protective equipment.

"exposure" means exposure through inhalation, ingestion, injection, skin or mucosal contact, absorption or other route of entry to the human body.