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OH - 3 - 1

RE: CONTROL OF OCCUPATIONAL ENVIRONMENTS AND THE PREVENTION OF OCCUPATIONAL DISEASES

KRS 211.180

Repeals and supersedes OH - 3

Regulations Service

Authority. This regulation is adopted and issued pursuant to Sections 211.080(1)(d) and 211.180 of the Kentucky Revised Statutes.

1. Definitions. As used in this regulation unless the context requires otherwise:

(1) "Contaminant" means any material which may be deleterious to health;

(2) "Department" means the Kentucky State Department of Health;

(3) "Dusts" means solid particles formed by the mechanical reduction of a solid material;

(4) "Effective Temperature" means the empirically determined index of the degree of warmth perceived by human beings on exposure to different combinations of dry bulb temperature, humidity, air motion, and radiant heat load and in numerical value is the same as the dry bulb temperature of air saturated with water vapor which will give the same sensation of warmth;

(5) "Fumes" means solid particles generated by condensation from the vapor state or by reaction from the vapor or gaseous state;

(6) "Gases" means fluids which normally have no bounding surfaces, which tend to fill completely their enclosures, and which can be changed to the liquid or solid state only by the combined effects of increased pressure and decreased temperature;

(7) "Health Hazard" means any condition, substance, or activity incident to the working environment which may contribute to illness, disease, or functional impairment, except traumatic injuries;

(8) "Maximum Concentration" means the maximum average atmospheric concentration of contaminant to which a man can ordinarily be exposed without likelihood of injury to health either immediately or after years of exposure;

(9) "Mists" means suspended liquid droplets generated by condensation from the vapor state or by breaking up a liquid into a dispersed state.

2. Employer Responsibility.

(1) Every employer shall be responsible for maintaining the occupational environment in full compliance with the requirements contained herein, shall provide all control

and personal protective devices and maintain same in good repair and shall apprise and instruct employees regarding health hazards to which they may be exposed and in the procedures to be followed in the application of control measures and in the use of protective equipment; Provided, however, that nothing contained herein shall be construed as disbarring any variation from any provision of this regulation where such variation has been demonstrated to be equally satisfactory in the department's judgment and has been approved by the department in writing.

(2) Whenever the department has reasonable grounds for believing that a health hazard exists or may exist it is empowered to direct the employer to investigate and correct same in a manner and to an extent acceptable to the department and to make available to the department the results of such investigation or correction. The department is empowered to require immediate discontinuance of any operation which it deems necessary.

(3) Employers shall not change or alter a health hazard in such a manner as to create a new health hazard or to worsen an existing health hazard. This includes air pollution problems.

(4) Employers shall post and distribute health and safety literature to employees as directed by the department.

(5) In the event an employer fails to remedy or correct a health hazard to the satisfaction of the department after being apprised of its existence and after being directed to remedy or correct same, the department is empowered to specify the particular type of control measures that shall be taken or direct discontinuance of the particular operation.

3. Employee Responsibility.

(1) Every employee shall use the control measures and personal protective equipment provided by the employer for the protection of the employee's health.

(2) Employees shall not abuse or violate control measures and protective equipment provided by the employer for the protection of the employee's health.

4. Control of Atmospheric Contaminants.

(1) Workers shall not be subjected to levels of atmospheric contaminants which may in the judgment of the department constitute an exposure hazardous to health. (Note: The current edition of the publication Threshold Limit Values published by the American Conference of Governmental Industrial Hygienists provides threshold limit values for use as a guide for control considerations.).

(2) Contaminants known or believed to be capable of causing acute or chronic impairment of health shall be controlled within such absolute maximum concentration limits as may be specified by the department for exposure of short or intermittent duration.

(3) Except as otherwise provided herein, control of atmospheric contaminants shall be accomplished by any of the following methods, or by a combination of any of the following methods:

(a) Substitution of a less toxic material for the material contaminating the workroom atmosphere;

(b) Local exhaust ventilation so that the contaminant is removed from the workroom atmosphere;

(c) Isolation of the operation so that the contaminant does not enter the general workroom atmosphere in hazardous concentrations is permissible provided that any worker who is exposed to a health hazard by entering the isolated area shall be furnished personal protection in accordance with the provisions of this regulation;

(d) Enclosure of the operation so that the contaminant does not escape into the workroom atmosphere in hazardous concentrations;

(e) Change of process or operation method (such as by wet methods, the use of foams, colloids, etc.) so that the hazard is controlled;

(f) Increase of general ventilation so that contaminant is diluted to a safe concentration before it enters any occupied area;

(g) Any other method approved by the department.

5. Infectious Agents. Measures shall be provided satisfactory to the department for the prevention of diseases and control of infectious agents which are incidental to the handling and/or processing of industrial or commercial materials or products, which are transmissible to man.

6. Visual Requirements. For any particular seeing task sufficient illumination levels, suitable contrast ratios, and/or reduction of glare shall be provided as deemed necessary by the Department for the prevention of adverse health effects to employees.

7. Noise. Environmental or personal protective controls shall be provided for any occupational noise exposure, as deemed necessary by the department for the prevention of adverse hearing effects to employees.

8. Radiation. Occupational exposures to ionizing radiation shall be controlled in accordance with the radiological health regulations adopted by the State Board of Health.

9. General Ventilation and Temperature requirements.

(1) Air shall be provided and satisfactorily distributed to all occupied working areas in a quantity and of a quality as required for the prevention of deleterious effects to health.

(2) Air supplied to or circulated in work areas shall be so distributed and limited in velocity that no worker is subjected

to drafts which cause excessive heat loss from the body with resulting predisposition to illness;

(3) In any workspace in which employees are subjected to essentially continuous exposure to extremes of temperature and/or humidity, the following thermal limits shall not be exceeded:

(a) For light sedentary activities, effective temperature (including radiation effect) 85°F.

(b) For heavy work (metabolism rate approaching 240 calories/square meter/hour), effective temperature (including radiation effect) 80°F.

(4) In any workspace in which the thermal limits of subsection (3) of this section would be exceeded, the duration of exposures shall be limited so as not to exceed those shown in the following tabulation, with sufficient relief period in a cooler environment following each exposure to permit recovery from the acute effects of the exposure.

	Maximum Continuous Exposure Hours	Effective Temperature, °F. (including radiation effect)
Light sedentary activity	1/2	106
	1	100
	1 1/2	97
	2	96
	3	94
	4	92
Heavy work (metabolism rate of 240 Cal/M^2/hr)	1/2	95
	1	89
	1 1/2	86
	2	85
	3	84
	4	83

(5) Thermal conditions falling outside the range of values specified herein or those causing illness shall be subject to control or exposure limitation as prescribed by the department.

(6) Air from any exhaust ventilation system handling materials known or believed to be capable of causing impairment to health shall not be recirculated without written permission from the department.

10. Local Exhaust Ventilation, Make-up Air and Re-entry Air

(1) When local exhaust ventilation is the sole means of control, or is used in combination with other means of control which are properly functioning, the adequacy of the ventilation shall be judged by its ability to limit the presence of contaminants to levels which the department deems acceptable.

(2) When local exhaust ventilation is a factor in control, it shall be used at all times when the machine or operation for which it is provided is in use and so long thereafter as hazardous quantities of any contaminant may be evolved.

(3) Two or more operations involving more than one substance shall not be connected to the same exhaust system when a combination of the substances removed may constitute a potential health hazard significantly greater than would exist if the materials were handled in separate systems.

(4) The discharge from any exhaust system shall be such that no air contamination therefrom shall enter any window, door, or other opening of any work space in quantities sufficient to create a health hazard to such space.

(5) Suitable air inlets shall be provided for adequate make-up air where exhaust ventilation is used for the control of health hazards.

11. Personal Protective Equipment and Practices.

(1) Employers shall require employees to use personal protective equipment and practice other health measures as directed by the department.

(2) Personal protective equipment shall not be used in lieu of environmental control measures specified in this regulation except when approved by the department.

(3) Personal protective equipment shall be provided for and fitted to each exposed worker when the use of such equipment is necessary for worker protection, and shall be maintained in an efficient and sanitary condition.

(4) Work clothing shall be washed and dried or a change of clothing provided as often as necessary to protect employees from adverse health effects. Work clothing shall be dry at the beginning of each work shift.

12. Housekeeping.

(1) All places of employment shall be kept in a clean and sanitary condition with all dust, spillage, and debris removed to maintain conditions not detrimental to good health.

(2) Where wet processes are used, drainage shall be maintained and such other measures shall be provided as are necessary for the protection of employee's health.

(3) Cleaning shall be done in such manner as to prevent the contamination of the air with dust or other contaminants in concentrations detrimental to health.

(4) All toxic materials shall be adequately labelled. In the event a toxic material is removed from its original container, the container to which it is transferred shall be adequately labelled. Additional information on the label shall be required as deemed necessary by the department.

13. Sanitation.

(1) There shall be provided in all places of employment an adequate potable water supply, approved by the department as to source and distribution.

(2) Drinking water facilities readily accessible to all employees, and of a type approved by the department, shall be provided in numbers according to the minimum schedules of the current "Kentucky State Plumbing Code".

(3) Expectorating within the place of employment shall not be permitted except into facilities (cuspidors) approved by the department as to type and maintenance.

(4) All waste incident to operation of the place of employment shall be collected, stored, and disposed of in a manner which will not constitute a health hazard.

(5) Effective measures shall be taken to prevent the entrance or harborage of insects, rodents, or other vermin within the working environment.

(6) Every place of employment shall be provided with toilet and handwashing facilities conveniently located and separate for each sex according to the minimum schedules of the current "Kentucky State Plumbing Code".

(7) All toilet and other sanitary facilities shall comply with the regulations of the State Board of Health relating thereto.

(8) Toilet paper shall be provided for each water closet or other toilet facility.

(9) Construction and ventilation of toilet rooms, construction and installation of toilet facilities, and the disposal of sewage waste shall conform with the requirements of the current "Kentucky State Plumbing Code".

(10) Each handwashing facility shall be provided with soap and hot and cold running water, except when demonstrated to the department that such is not necessary for the protection of health.

(11) Individual clean towels of cloth or paper shall be provided. Other apparatus for drying the hands may be substituted only after approval by the department. Hot air dryers may be used in lieu of towels.

(12) A minimum of one shower bath with ample supply of hot and cold water from one fixture shall be provided for every 15 employees or fraction thereof exposed to skin contamination with poisonous, radioactive, infectious, or irritating materials, or to excessive occupational thermal conditions.

(13) Each toilet room and wash room shall be provided with a receptacle for refuse disposal.

(14) Dressing rooms separate from the work place shall be provided for employees whose work clothes are exposed to contamination with poisonous, radioactive, infectious, or irritating materials, and separate lockers or equivalent facilities shall be provided for street and working clothes.

14. Eating Facilities.

(1) Where lunch room, cafe or cafeteria is provided within the plant same shall be constructed, maintained and operated to conform with the applicable statutory requirements and the regulations relating thereto adopted by the State Board of Health.

(2) No employee shall be permitted or required to partake of any part of his lunch or eat other food at any time, where there is present any industrial poison or other substance that may be injurious to the employee's health.

15. Health Services and Facilities.

(1) Where 10 or more women are employed at any one time, at least one retiring room for their exclusive use in time of illness shall be provided.

(2) Where less than 10 women are employed and a retiring room is not furnished, some equivalent space shall be provided, screened and made suitable for their exclusive use in time of illness.

(3) At least one couch or bed shall be provided in the retiring room in every place where more than 10 women are employed. The number of such beds or couches required shall be as follows: 10 to 100 women, one bed; 100 to 250 women, two beds; and one additional bed for each additional 250 women employed.

(4) At every place of regular employment facilities shall be provided for the prompt emergency treatment of illnesses and accidents with equipment and supplies approved in writing by a licensed doctor of medicine.

(5) A first aid worker possessing a current certificate of training issued by an organization or agency acceptable to the Department shall be immediately available during each production shift except when other equivalent emergency service acceptable to the department is equally available.

(6) Preplacement physical examinations by a licensed physician shall be required by an employer for any person assuming any job which involves any exposure or condition listed below, to detect abnormal physical conditions which may increase the individual's susceptibility to the specific exposure or condition involved in the job:

(a) exposure to pneumoconiosis producing dust;

(b) excessive thermal exposure;

(c) strenuous physical exertion;

(d) exposure to intense noise;

(e) exposure to ionizing radiation;

(f) such other toxic exposures or hazardous conditions which in the opinion of the department warrants such physical examination.

(7) When the nature of employment is altered to include a new exposure or a condition specified in this section, such additional physical examinations shall be required as are necessary to determine the fitness of the employee for the new conditions of employment unless a previous examination is sufficient for this determination.

(8) The examining physician shall inform the employee of any health risk incident to employment and shall furnish the employer with an evaluation of the employee insofar as it applies to the conditions under which he must work.

(9) The provisions of this section shall not be construed to require violation of professional ethics applying to doctor-patient relationships.

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The undersigned, Russell E. Teague, M.D., states that he is Secretary of the State Board of Health and that the foregoing regulation was duly adopted by the State Board of Health at a meeting held at Frankfort, Kentucky, on the 15th day of August, 1963.

Witness my hand and seal of office on this the 16th day of August, 1963.

Russell E. Teague, M.D.
Secretary
Kentucky State Board of Health