

RULES CERTIFICATE

STATE OF WISCONSIN)
) SS
DEPT. OF INDUSTRY,)
LABOR & HUMAN RELATIONS)

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

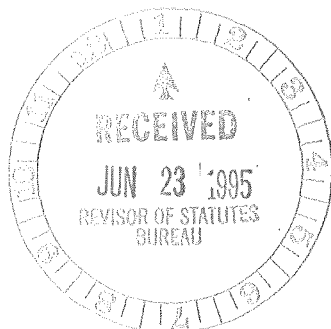
I, Carol Skornicka, Secretary of the Department of Industry,
Labor and Human Relations, and custodian of the official records of said department, do hereby certify that
the annexed rule(s) relating to public employe safety and health
(Subject)

were duly approved and adopted by this department on 6/21/95
(Date)

I further certify that said copy has been compared by me with the original on file in the department
and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set
my hand and affixed the official seal of the
department at 4:00 p.m.
in the city of Madison, this 21st
day of June A.D. 1995

Carol Skornicka
Secretary



ORDER OF ADOPTION

Pursuant to authority vested in the Department of Industry, Labor and Human Relations by section(s)

101.02 (1) and 101.055 (3)

Stats., the Department of Industry, Labor and Human Relations creates; amends;

repeals and recreates; repeals and adopts rules of Wisconsin Administrative Code chapter(s):

ILHR 31 and 32

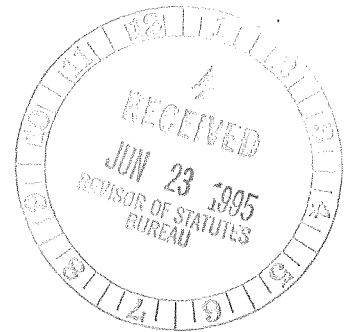
(Number)

Public Employe Safety and Health

(Title)

The attached rules shall take effect on the first day of the month following publication

in the Wisconsin Administrative Register pursuant to section 227.22, Stats.



Adopted at Madison, Wisconsin this

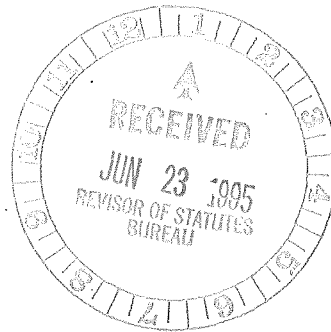
date: June 21, 1995

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN
RELATIONS

Carol Sporn
Secretary



RULES in FINAL DRAFT FORM



Rule No.: Chapters ILHR 31 and 32

Relating to: Public Employee Safety and Health

Clearinghouse Rule No.: 94-163

The Wisconsin Department of Industry, Labor and Human Relations proposes an order to repeal ch. ILHR 31, ss. ILHR 32.15 (1) to (14), ILHR 32.16 (12), ILHR 32.16 (20), ILHR 32.27 (6) (a) 1. Note and ILHR 32.50 Table 32.50-1 items 8. to 14.; to renumber ss. ILHR 32.16 (4) to (11) and ILHR 32.16 (15) to (18); to renumber and amend s. ILHR 32.16 (19); to amend ss. ILHR 32.15 (intro.), ILHR 32.27 (2) (b) and ILHR 32.50 Table 32.50-1 items 1. to 3.; and to create ss. ILHR 32.16 (4), ILHR 32.16 (15), ILHR 32.17, ILHR 32.27 (2) (d) and (e), ILHR 32.27 (9), ILHR 32.293, ILHR 32.295, ILHR 32.297, ILHR 32.31 (3), ILHR 32.361 and 32.363, ILHR 32.42 and 32.43, ILHR 32.50 (2) Note, ILHR 32.50 Table 32.50-3, ch. ILHR 32 subch. VI and ch. ILHR 32 Appendix, relating to public employe safety and health.

* * * * *

Analysis of Proposed Rules

Statutory Authority: ss. 101.02 (1) and 101.055 (3), Stats.
Statutes Interpreted: s. 101.055 (3), Stats.

The Department of Industry, Labor and Human Relations is responsible for adopting standards to protect the safety and health of public employes in the state of Wisconsin. The adopted standards must provide protection at least equivalent to that afforded to private sector employes under standards administered and enforced by the Federal Occupational Safety and Health Administration (OSHA).

Chapter ILHR 31 establishes specific safety and health standards for public employes when operating in confined spaces. Chapter ILHR 32 contains general safety and health standards for all public employes through the incorporation by reference of several OSHA standards. Chapter ILHR 32 also contains additional requirements that modify the OSHA standards.

The proposed rules consist of miscellaneous revisions in chapter ILHR 32, including the incorporation by reference of the current edition of the OSHA standards. The current OSHA standards now include requirements for confined space entry; however, these requirements are not being incorporated by reference. Under the proposed rules, chapter ILHR 31 is repealed and the confined space rules are added to chapter ILHR 32, with several revisions that follow the OSHA standards. The revisions to the confined space rules include new requirements relating to engulfment, workplace evaluation, a written entry program, confined space reclassification, work involving multiple employers, rescue operations, and training.

The proposed miscellaneous revisions in chapter ILHR 32 generally relate to exhaust ventilation and exposure to hazardous substances. The proposed rules require compliance with the latest threshold limit values and biological exposure indices published by the American Conference of Governmental Industrial Hygienists. The proposed rules include requirements for laboratory fume hoods, tempered make-up air, and darkroom ventilation. The proposed rules modify the OSHA standards relating to exposure to air contaminants by requiring compliance with the 1992 OSHA exposure levels rather than the 1994 levels. The 1992 levels are lower than the 1994 levels and are the same as those currently in effect in chapter ILHR 32.

* * * * *

SECTION 1. Chapter ILHR 31 is repealed.

[Note to reader: Confined spaces rules will be contained in chapter ILHR 32 subchapter VI as shown at the end of this draft.]

SECTION 2. ILHR 32.15 (intro.) is amended to read:

ILHR 32.15 OSHA SAFETY AND HEALTH STANDARDS. Except as provided in s. ILHR 32.16 and subch. IV, all places of employment and public buildings of an employer shall comply with the ~~following~~ federal Occupational Safety and Health Administration (OSHA) requirements ~~÷~~ adopted under s. ILHR 32.50 (4). The OSHA regulations for construction shall apply where the OSHA general occupational safety and health standards do not cover the activity involved.

SECTION 3. ILHR 32.15 (1) to (14) are repealed.

SECTION 4. ILHR 32.16 (4) to (11) are renumbered ILHR 32.16 (5) to (12).

SECTION 5. ILHR 32.16 (4) is created to read:

ILHR 32.16 (4) Chapter ILHR 10, Flammable and Combustible Liquids;

SECTION 6. ILHR 32.16 (12) is repealed.

SECTION 7. ILHR 32.16 (15) to (18) are renumbered ILHR 32.16 (16) to (19).

SECTION 8. ILHR 32.16 (15) is created to read:

ILHR 32.16 (15) Chapter ILHR 35, Infectious Agents;

SECTION 9. ILHR 32.16 (19) is renumbered ILHR 32.16 (20) and amended to read:

ILHR 32.16 (20) Chapters ILHR 81 to ~~86~~ 87, Plumbing; and

SECTION 10. ILHR 32.16 (20) is repealed.

SECTION 11. ILHR 32.17 is created to read:

ILHR 32.17 ACGIH STANDARDS. All places of employment and public buildings of a public employer shall comply with the American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit values and biological exposure indices adopted under s. ILHR 32.50 (4). The ACGIH standards apply only to substances not covered by the OSHA standards specified in s. ILHR 32.15.

SECTION 12. ILHR 32.27 (2)(b) is amended to read:

ILHR 32.27 (2)(b) The exhaust ventilation shall be designed and installed to remove the harmful dusts, fumes, vapors and gases at the source to prevent their entrance into the breathing zone of an operator or other persons in the vicinity. Laboratory fume hoods shall be operated with a minimum 100 feet per minute face velocity at full open or sash stop position.

Note: A tolerance of plus or minus 10 percent is allowed on the face velocity measurement. Also, the department will accept fume hood operation that meets ASHRAE standard 110.

SECTION 13. ILHR 32.27 (2)(d) and (e) are created to read:

ILHR 32.27 (2)(d) Tempered make-up air shall be installed to insure the flow of air effectively picks up dusts, fumes, vapors and gases prior to being exhausted.

(e) Local exhaust ventilation ductwork specifically designed for the removal of toxic dusts, fumes, vapors and gases shall be maintained at a negative pressure through occupied areas.

SECTION 14. ILHR 32.27 (6)(a)1. Note is repealed.

SECTION 15. ILHR 32.27 (9) is created to read:

ILHR 32.27 (9) DARKROOM VENTILATION. Exhaust ventilation shall be provided for all darkroom facilities. The capacity of the exhaust ventilation shall equal at least 12 air changes per hour, or an engineered local exhaust system shall be provided.

SECTION 16. ILHR 32.293 is created to read:

ILHR 32.293 [29 CFR 1910.119] PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS. Substitute the following wording for 29 CFR 1910.119 (e)(1)(i) to (iv):

(1) No less than 25 percent of the initial process hazards analyses shall be completed by the first day of the month 2 years after the effective date of these rules...[revisor inserts date].

(2) No less than 50 percent of the initial process hazards analyses shall be completed by the first day of the month 3 years after the effective date of these rules...[revisor inserts date].

(3) No less than 75 percent of the initial process hazards analyses shall be completed by the first day of the month 4 years after the effective date of these rules...[revisor inserts date].

(4) All initial process hazards analyses shall be completed by the first day of the month 5 years after the effective date of these rules...[revisor inserts date].

SECTION 17. ILHR 32.295 is created to read:

ILHR 32.295 [29 CFR 1910.146] PERMIT-REQUIRED CONFINED SPACES. Section 29 CFR 1910.146 is not included as part of this chapter.

Note: See subch. VI for requirements relating to confined spaces.

SECTION 18. ILHR 32.297 is created to read:

ILHR 32.297 [29 CFR 1910.151] MEDICAL SERVICES AND FIRST AID. Substitute the following wording for 29 CFR 1910.151 (c):

Whenever the eyes or body of any person may be exposed to materials that are corrosive or can cause irreversible eye or bodily injury, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

Note: The department will accept facilities that comply with ANSI standard Z358.1, Emergency Eyewash and Shower Equipment.

SECTION 19. ILHR 32.31 (3) is created to read:

ILHR 32.31 (3) INCOMPATIBLE MATERIALS. Incompatible materials shall be segregated to prevent accidental contact with each other that may result in fire, explosion or toxic gas emission.

Note: Guidance in the storage of incompatible materials can be obtained in publications from the National Fire Protection Association, such as NFPA 49 and 491M.

SECTION 20. ILHR 32.361 and 32.363 are created to read:

ILHR 32.361 [29 CFR 1910.1000] AIR CONTAMINANTS. (1) SUBSTITUTION. In lieu of 29 CFR 1910.1000, July 1, 1994 edition, an employe's exposure to air contaminants shall be in accordance with the requirements of 29 CFR 1910.1000, July 1, 1992 edition.

Note: The requirements of 29 CFR 1910.1000, July 1, 1992 edition were first adopted by OSHA in 1989. Those requirements have been in effect under this chapter since April 1, 1991.

(2) ADDITION. In addition to the requirements of 29 CFR 1910.1000, the employer shall implement the monitoring or measuring of any substance listed in Table Z-1-A where exposure at or above the time weighted average, short term exposure limit or ceiling limit is reasonably likely to occur.

ILHR 32.363 [29 CFR 1910.1028] BENZENE. Section 29 CFR 1910.1028 (a)(2)(v) is not included as part of this chapter.

SECTION 21. ILHR 32.42 and 32.43 are created to read:

ILHR 32.42 EXPOSURE TO TRAFFIC. (1) SAFETY VESTS. Employees who work on highways, roads, streets or their easements shall wear traffic safety vests or use clothing or equipment that provides equivalent protection.

(2) TRAFFIC CONTROL DEVICES. Pursuant to s. 349.065, Stats., traffic control devices to warn traffic and protect employes shall be placed and maintained in accordance with the uniform traffic control devices manual.

Note: The uniform traffic control devices manual may be obtained from the Department of Transportation, Division of Highways, 4802 Sheboygan Avenue, Madison, Wisconsin 53702, telephone 608/266-8417.

ILHR 32.43 RIDING ON MOTOR VEHICLES. Employees may ride on motor vehicles in other than factory installed passenger seats equipped with seatbelts only when the speed of the motor vehicle is less than 10 miles per hour.

SECTION 22. ILHR 32.50 (2) Note is created to read:

ILHR 32.50 (2) Note: Some OSHA standards are available from the Commerce Clearing House, Inc., 4025 West Peterson Avenue, Chicago, IL 60646 and the Construction Bookstore, P.O. Box 2959, Gainesville, FL 32602.

SECTION 23. Note to Revisor: Change the address in s. ILHR 32.50 Table 32.50-1 from 517 East Wisconsin Avenue to 310 West Wisconsin Avenue, Suite 150.

SECTION 24. ILHR 32.50 Table 32.50-1 items 1. to 3. are amended to read:

TABLE 32.50-1
(Partial Table)

1. Recording and Reporting Occupational Injuries and Illnesses, Title 29 CFR Part 1904, July 1, 1989 1994.

2. Occupational Safety and Health Standards ~~for General Industry~~, Title 29 CFR Part 1910, July 1, 1989 1994.

3. ~~Occupational Safety and Health Standards~~ Regulations for Construction Industry, Title 29 CFR Part 1926, July 1, 1989 1994.

SECTION 25. ILHR 32.50 Table 32.50-1 items 7. to 14. are repealed.

SECTION 26. ILHR 32.50 Table 32.50-3 is created to read:

TABLE 32.50-3

ACGIH	American Conference of Governmental Industrial Hygienists Technical Affairs Office 1330 Kemper Meadow Drive Cincinnati, OH 45240 Telephone: 513/742-2020
1.	Threshold Limit Values for Chemical Substances and Physical Agents, and Biological Exposure Indices, 1994-1995 edition.

SECTION 27. Chapter ILHR 32 Subchapter VI is created to read:

SUBCHAPTER VI - CONFINED SPACES

ILHR 32.61 DEFINITIONS. In this subchapter:

(1) "Attendant" means an individual stationed outside one or more confined spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's entry program.

(2) "Authorized entrant" means an employe who is authorized by the employer to enter a confined space.

(3) "Confined space" means a space that:

(a) Is large enough and so configured that an employe can enter and perform assigned work;

(b) Has limited or restricted means for entry or exit, such as a tank, vessel, silo, storage bin, hopper, vault and pit; and

(c) Is not designed for continuous employe occupancy.

(4) "Engulfment" means the surrounding and effective capture of a person by a liquid or finely divided flowable solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction or crushing.

(5) "Entry" means the action by which a person passes through an opening into a confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

(6) "Entry supervisor" means the person, such as the employer, foreman or crew chief, responsible for determining if acceptable entry conditions are present at a confined space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry.

Note: An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

(7) "Full body harness" means a harness having a waist belt, shoulder straps, leg straps, and "D" ring or shoulder ring attached no lower than the shoulder blades.

(8) "Hazardous atmosphere" means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following causes:

(a) Flammable gas, vapor, or mist in excess of 10% of its lower explosive limit;

(b) Airborne combustible dust at a concentration that meets or exceeds its lower explosive limit;

(c) Atmospheric oxygen concentrations below 19.5% or above 23.5%;

(d) Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environment Control, or in Subpart Z, Toxic and Hazardous Substances, of title 29 CFR part 1910 and which could result in the employee exposure in excess of its dose or permissible exposure limit; or

(e) Any other atmospheric condition that is immediately dangerous to life or health.

(9) "Immediately dangerous to life or health" means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a confined space.

(10) "Lower explosive limit" means the lower limit of flammability of a gas or vapor at ordinary ambient temperatures expressed as a percentage of the gas or vapor in air by volume.

(11) "Rescue service" means the personnel designated and trained to rescue employees from confined spaces.

ILHR 32.62 GENERAL EMPLOYER RESPONSIBILITIES. (1) ENTRY REQUIREMENTS. No employer may require an employee to enter or work in a confined space, unless it is in accordance with the requirements of this subchapter.

(2) WORK PLACE EVALUATION. The employer shall evaluate the work place to determine if any confined spaces are present. If the work place contains confined spaces, the employer shall inform employees by posting legible signs at the entrances to the confined spaces. Signs are not required at manholes located in sewer systems or in public areas.

Note: To inform employes, a sign could read "DANGER-CONFINED SPACE-DO NOT ENTER", or other similar language.

(3) ALTERNATIVE PROCEDURE. (a) An employer may use the alternative entry procedure specified in par. (b) for a heating system tunnel or heating system vault, provided that:

1. The employer can demonstrate that the only hazard posed by the tunnel or vault is an actual or potential hazardous atmosphere;

2. The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain the tunnel or vault safe for entry; and

3. The employer develops monitoring and inspection data that supports the demonstrations required by subds. 1. and 2.

(b) An employer need not comply with the continuous monitoring requirements under s. ILHR 32.65 provided that the atmosphere within the heating system tunnel or heating system vault is periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.

(4) ENTRY PROGRAM. If the employer determines that its employes will enter confined spaces, the employer shall develop and implement a written entry program. Under the written entry program, the employer shall designate the employes who have active roles in entry operations, identify the duties of each employe and provide each employe with the training required. The written entry program shall include checklists for entry into confined spaces and be available for inspection by employes and their representatives.

Note a: See Appendix for a copy of a sample checklist. A sample checklist is available from the department at the Division of Safety and Buildings, Bureau of Safety Services, P.O. Box 7969, Madison, Wisconsin 53707, telephone 608/266-2780.

Note b: The checklist is intended to be a hazard assessment tool to determine compliance with the written entry program and to protect employes before entering a confined space.

(5) ENTRY PREVENTION. If the employer determines that its employes will not enter confined spaces, the employer shall take effective measures to prevent its employes from entering the confined spaces.

ILHR 32.63 SAMPLING. (1) SAMPLING BEFORE ENTRY. No person may enter a confined space until the atmosphere of the confined space is sampled and air quality is determined for all levels and all areas of the confined space.

(2) SUBSTANCES SAMPLED FOR. The atmosphere of the confined space shall be sampled for:

(a) Oxygen;

(b) Hydrogen sulfide or carbon monoxide, depending on the hazard present;

(c) Combustible gas; and

(d) Any hazardous substance which an employe may work with or be exposed to and which the employer has reason to believe may be present.

(3) SAMPLING DEVICE. (a) A direct readout sampling device which can simultaneously test for oxygen, hydrogen sulfide or carbon monoxide, and combustible gas without manual switching shall be used to sample the atmosphere of a confined space.

(b) The sampling device shall be equipped with audible and visible warning devices which indicate when an atmosphere of a confined space has:

1. An oxygen content of less than 19.5% or greater than 23.5%;
2. A hydrogen sulfide content of 10 parts per million or more, or a carbon monoxide content of 35 parts per million or more; or
3. A combustible gas content of 10% or more of the lower explosive limit.

(c) The sampling device shall be calibrated relative to the oxygen content of the ambient air at the time of sampling. Calibration of the sampling device relative to the oxygen content shall be performed where the 20.9% natural content of oxygen in the air is most likely to occur.

Note: Oxygen calibration should not be performed near a confined space opening.

(d) A sampling device which has a zero set shall be zeroed in a clean atmosphere before each sampling. Calibration of a sampling device shall be conducted as often as recommended by the manufacturer, but at least once every 6 months.

(e) The sampling device or a non-sparking probe attached to the sampling device shall be used to sample the atmosphere of a confined space. When entry to a confined space is by means of a manhole, a probe shall be inserted through the pick-hole of the manhole cover, or the manhole cover shall be pried open on the downwind side to allow just enough room for insertion of the probe or device.

(4) DETECTOR FOR HAZARDOUS SUBSTANCES. The sampling of the atmosphere of a confined space for hazardous substances shall be by the use of a testing device capable of detecting and measuring the concentrations of hazardous substances likely to be present.

ILHR 32.64 AIR QUALITY. (1) ATMOSPHERE LIMITS. Except as provided in sub. (3), a confined space may not be entered, unless the atmosphere of the confined space has:

- (a) An oxygen content of at least 19.5% or more but not more than 23.5%;
 - (b) A hydrogen sulfide content of less than 10 parts per million or a carbon monoxide content of less than 35 parts per million;
 - (c) A combustible gas content less than 10% of the lower explosive limit;
- and

(d) An exposure level, for any hazardous substance determined to be present, which is at or below the threshold limit value - short term exposure limit for any substance specified by the American Conference of Governmental Industrial Hygienists in the publication adopted under s. ILHR 32.50 (4), or the short term exposure limits found in 29 CFR 1910.1000.

(2) VENTILATION. A confined space with an atmosphere which is not within the limits specified in sub. (1) may be ventilated and may be entered when sampling indicates an atmosphere within the limits specified in sub. (1).

(3) SUPPLIED AIR. A confined space with an atmosphere which cannot be brought within the limits specified in sub. (1) (a), (b) and (d) may be entered if a self-contained positive pressure breathing apparatus or a Type C air line respirator is used. An approved air purifying respirator may be used in atmospheres that do not have the potential to be immediately dangerous to life or health.

(4) ENTRY PROHIBITED. A confined space with an atmosphere which is not within the limit specified in sub. (1) (c) may not be entered even if a breathing apparatus or respirator is used.

(5) CONFINED SPACE CLASSIFICATION. To determine the specific entry procedures to be followed, a confined space which may be entered shall be classified as either a level 1 or a level 2 space based upon the air quality and the sources of possible hazards, as follows:

(a) A level 1 space is a confined space with an atmosphere within the limits specified in sub. (1) and the only source of contamination expected or likely to affect the atmosphere is the employee's presence or the employee's activities.

(b) A level 2 space is a confined space that has one or more of the following characteristics:

1. Contains a hazardous atmosphere;
2. Contains a material that has the potential for engulfment of an authorized entrant;
3. Has an internal configuration that could cause an authorized entrant to be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
4. Contains any other serious safety or health hazard.

(6) CONFINED SPACE RECLASSIFICATION. A confined space may be reclassified from a level 2 space to a level 1 space under the following conditions:

(a) If the confined space poses no atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the level 2 space may be reclassified as level 1 for as long as the non-atmospheric hazards remain eliminated.

(b) If it is necessary to enter the level 2 space to eliminate hazards, other than explosive atmospheres, such entry shall follow the level 2 entry requirements. If testing and inspection during that entry demonstrate that the hazards within the level 2 space have been eliminated, the space may be reclassified as level 1 for as long as the hazards remain eliminated.

ILHR 32.65 ENTRY PROCEDURES. (1) LEVEL 1 SPACES. Entry into or work in a level 1 space shall be performed in accordance with the following:

(a) The atmosphere within the authorized entrant's immediate area shall be continuously monitored for oxygen, hydrogen sulfide or carbon monoxide, and combustible gas while in the confined space.

(b) Signals from the monitoring device shall immediately indicate when the atmosphere falls outside any of the air quality limits specified in s. ILHR 32.64 (1)(a) to (c).

(c) While in a confined space, if the air quality falls outside any of the limits specified in s. ILHR 32.64 (1)(a) to (d), the authorized entrant shall exit the confined space and the confined space shall be reclassified as a level 2 space.

(d) Ventilation may not be used in lieu of monitoring devices.

(2) LEVEL 2 SPACES. Entry into or work in a level 2 space shall be performed in accordance with the following:

(a) The atmosphere within the authorized entrant's immediate area shall be continuously monitored for oxygen, hydrogen sulfide or carbon monoxide, combustible gas and any other hazardous substance which the employer has reason to believe may be present in the confined space.

(b) Signals from the monitoring device shall immediately indicate when the atmosphere is not within any of the limits specified in s. ILHR 32.64 (1)(a) to (d).

(c) While in the confined space, if the air quality falls outside any of the limits specified in s. ILHR 32.64 (1)(a) to (d), the authorized entrant shall exit the confined space.

(d) Ventilation may not be used in lieu of monitoring devices. An employe may not enter the space until forced ventilation has eliminated any hazardous atmosphere. If forced air ventilation is used, it shall be so directed as to ventilate the immediate areas where an authorized entrant is or will be present within the space and shall continue until all entrants have left the confined space. The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the confined space.

Note a: A clean source would be one within the limits of s. ILHR 32.64 (1)(a) to (d).

Note b: When using forced air ventilation, consideration should be given to the possibility of static discharge which could be a source of ignition.

(e) No employe may enter the confined space without at least one attendant stationed at the entrance of the confined space. A flagman who is directing traffic may not serve as the attendant. The employer shall provide at least one attendant outside the confined space for the duration of entry operations.

(f) Where entry into the confined space is by means of a manhole or a top opening, a mechanical retrieval device shall be set up for rescue attempts prior to entry.

(g) While in the confined space, an authorized entrant shall have voice or other means of communication with the attendant.

(h) An authorized entrant entering vertically into the confined space shall wear a full body harness secured to a retrieval line.

(i) An authorized entrant who makes horizontal movement into the confined space, such as a sewer, or who descends in such a manner that renders a mechanical retrieval device useless for a rescue attempt, shall wear:

1. A self-contained positive pressure breathing apparatus or a Type C air line respirator; and

2. A full body harness.

(3) WORK INVOLVING MULTIPLE EMPLOYERS. When 2 employers arrange to have employes perform work that involves confined space entry, each employer shall:

(a) Apprise the other employer of the elements, including the hazards identified and each employer's experience with the space, that make the space in question a confined space; and

(b) Coordinate entry operations with the other employer when personnel from both employers will be working together in or near confined spaces.

ILHR 32.66 RESCUE. (1) ADDITIONAL HELP. Prior to entering a confined space, procedures shall be established for acquiring additional help in the event of an emergency. Communication shall be made for additional help before a rescue attempt is made into any confined space.

(2) DEVELOPMENT OF PROCEDURES. The employer shall develop and implement procedures for summoning rescue and emergency services, for rescuing entrants from confined spaces, for providing necessary emergency services to rescued employes, and for preventing unauthorized personnel from attempting a rescue.

(3) PERFORMING RESCUE SERVICES. The following requirements apply to employers who have employes enter confined spaces to perform rescue services:

(a) The employer shall ensure that each member of the rescue service is provided with, and is trained to use properly, the personal protective and rescue equipment necessary for making rescues from confined spaces.

(b) Each member of the rescue service shall be trained to perform the assigned rescue duties. Each member of the rescue service shall also receive the training required of authorized entrants under s. ILHR 32.67 (1).

(c) Each member of the rescue service shall practice making confined space rescues at least once every 12 months by means of simulated rescue operations in which they remove dummies, manikins or actual persons from the actual confined spaces or from representative confined spaces. Representative confined spaces shall, with respect to opening size, configuration and accessibility, simulate the types of confined spaces from which rescue is to be performed.

(d) Each member of the rescue service shall be trained and certified in basic first aid and adult cardio pulmonary resuscitation.

(4) HOST EMPLOYER DUTIES. When a host employer arranges to have persons other than the host employer's employees perform confined space rescue, the host employer shall:

(a) Inform the rescue service of the hazards they may confront when called on to perform rescue at the host employer's facility; and

(b) Provide the rescue service with access to all confined spaces from which rescue may be necessary so that the rescue service can develop the rescue plans and practice rescue operations.

(5) NON-ENTRY RESCUE. To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a confined space, unless the retrieval equipment would increase overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems shall meet the following requirements:

(a) Each authorized entrant shall use a full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, or above the entrant's head. Wristlets may be used in lieu of the full body harness if the employer can demonstrate that the use of a full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.

(b) The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the confined space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type confined spaces more than 5 feet deep.

(6) SUBSTANCE INFORMATION. If an injured entrant is exposed to a substance for which a Material Safety Data Sheet (MSDS) or similar written information is required to be kept at the worksite, that MSDS or written information shall be made available to the medical facility treating the exposed entrant.

ILHR 32.67 GENERAL SAFETY REQUIREMENTS. (1) TRAINING AND EQUIPMENT. (a) Authorized entrants shall be trained and equipped to recognize, understand and control the hazards that may be encountered in confined spaces.

(b) An employer shall provide all authorized entrants with a written confined space entry procedure, and the entrants shall be trained according to the established procedure.

(c) An employer shall provide a written standard operating procedure on the selection, use and care of required breathing apparatus, with proper employe training and fitting according to 29 CFR 1910.134.

(d) An employer shall provide training in basic first aid and adult cardio pulmonary resuscitation for all authorized entrants and attendants.

(e) Training shall establish employe proficiency in the duties required by this subchapter and shall introduce new or revised procedures, as necessary, for compliance with this subchapter. Training shall be provided to each affected employe:

1. Before the employe is first assigned duties under this subchapter;
2. Before there is a change in assigned duties under this subchapter; and
3. Whenever there is a change in confined space operations that presents a hazard about which an employe has not previously been trained.

(f) Personal protective equipment required for safe confined space entry shall be provided by the employer and worn by authorized entrants.

(g) No employe may smoke within 10 feet of a confined space.

(h) When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employe working in the space from foreign objects entering the space.

(i) Sampling devices used in confined spaces shall be intrinsically safe for use in combustible atmospheres.

(j) Self-contained positive pressure breathing apparatus used in confined spaces shall have at least a 30-minute air supply rating. A Type C air line respirator used in confined spaces shall be equipped with an escape air tank with an adequate supply of air to exit the confined space and a maximum of 300 feet of air line hose.

(2) WORKING IN STREETS. Work at confined spaces which are located in streets shall be performed in accordance with the following:

(a) A vehicle's beacon and 4-way flashers shall be activated upon approach to an entrance of a confined space.

(b) A vehicle shall be parked to permit traffic to flow in an unobstructed manner and, where possible, to provide protection for the employes.

(c) A vehicle shall be parked so vehicle exhaust cannot accumulate in the confined space. If this is not possible, the vehicle's exhaust pipe shall be extended away from the confined space.

Note: See s. ILHR 32.42 also.

ILHR 32.68 DUTIES OF AUTHORIZED ENTRANTS. The employer shall ensure that all authorized entrants:

- (1) Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- (2) Properly use equipment;
- (3) Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space;
- (4) Alert the attendant whenever:
 - (a) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation; or
 - (b) The entrant detects a prohibited condition; and
- (5) Exit from the confined space as quickly as possible whenever:
 - (a) An order to evacuate is given by the attendant or the entry supervisor;
 - (b) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation;
 - (c) The entrant detects a prohibited condition; or
 - (d) An evacuation alarm is activated.

ILHR 32.69 DUTIES OF ATTENDANTS. The employer shall ensure that each attendant:

- (1) Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- (2) Is aware of possible behavioral effects of hazard exposure in authorized entrants;
- (3) Continuously maintains an accurate count of authorized entrants in the confined space and ensures that the means used to identify authorized entrants accurately identifies who is in the space;
- (4) Remains outside the confined space during entry operations until relieved by another attendant;

Note: When the employer's entry program allows attendant entry for rescue, attendants may enter a confined space to attempt a rescue if they have been trained and equipped for rescue operations and if they have been properly relieved.

- (5) Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the confined space;

(6) Monitors activities inside and outside the confined space to determine if it is safe for authorized entrants to remain in the space and orders the entrants to evacuate the space immediately under any of the following conditions:

(a) If the attendant detects a prohibited condition;

(b) If the attendant detects the behavioral effects of hazard exposure in an authorized entrant;

(c) If the attendant detects a situation outside the confined space that could endanger the authorized entrants; or

(d) If the attendant cannot effectively and safely perform all the duties required;

(7) Summon rescue and other emergency services as soon as the attendant determines that authorized entrants need assistance to escape from confined space hazards;

(8) Takes the following actions when unauthorized persons approach or enter a confined space while entry is underway:

(a) Warn the unauthorized persons that they must stay away from the confined space;

(b) Advise the unauthorized persons that they must exit immediately if they have entered the confined space; and

(c) Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the confined space;

(9) Performs non-entry rescues as specified by the employer's rescue procedure; and

(10) Performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

ILHR 32.70 DUTIES OF ENTRY SUPERVISORS. The employer shall ensure that each entry supervisor:

(1) Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;

(2) Verifies that all required tests have been conducted and that all required procedures and equipment are in place before allowing entry to begin;

(3) Terminates the entry when the entry operations have been completed or when a condition that is not allowed arises in or near the confined space;

(4) Verifies that rescue services are available and that the means for summoning them are operable;

(5) Removes unauthorized individuals who enter or attempt to enter the confined space during entry operations; and

(6) Determines, whenever responsibility for entry operation is transferred and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry program.

SECTION 28. Chapter ILHR 32 Appendix is created to read:

CHAPTER ILHR 32
APPENDIX

The material contained in this appendix is for clarification purposes only. The material is numbered to correspond to the number of the rule that makes reference to appendix material.

A32.62 (4) SAMPLE CHECKLIST. The following is a copy of a sample checklist:

Confined Space Pre-Entry Checklist

Date and Time _____
 Job Site/Space _____
 Equipment to be worked on: _____

Job Supervisor _____
 Work to be Performed: _____

Attendant Personnel _____

1. Atmospheric checks: Time _____
 Oxygen _____
 Explosive _____ % L.F.L.
 Toxic _____ PPM

2. Tester's signature _____

3. Source isolation (no entry): N/A Yes No
 Pumps or lines blinded, () () ()
 Disconnected, or blocked () () ()

4. Ventilation modification: N/A Yes No
 Mechanical () () ()
 Natural ventilation only () () ()

5. Atmospheric check after isolation and ventilation:
 Oxygen _____ % > 19.5 < 23.5%
 Explosive _____ % L.F.L. < 10 %
 Toxic _____ PPM < 10 PPM(H₂S) < 35 PPM (CO)
 Time _____
 Tester's signature _____

6. Communication procedures: _____

7. Rescue procedures: _____

8. Entry, attendant, and back-up persons: Yes No
 Successfully completed required training? () ()
 Is it current? () ()

9. Equipment: N/A Yes No
 Direct reading air monitoring equipment tested () () ()
 Safety harnesses and lifelines for entry and standby persons () () ()
 Hoisting equipment () () ()
 Powered communications () () ()
 SCBA's for entry and standby persons () () ()
 Protective clothing () () ()
 All electric equipment listed Class I, Division I, Group D, and non-sparking tools () () ()

10. Air monitoring device can simultaneously test for oxygen, toxic and combustible gases () () ()

I have reviewed the work authorized by this checklist and the information contained here-in. Written instructions and safety procedures have been received and are understood. Entry cannot be performed if any squares are marked in the "No" column. This checklist is not valid unless all appropriate items are completed.

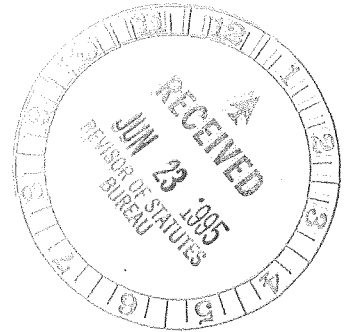
Checklist Completed By: _____ Entrant(s)
 _____ Entrant(s)
 _____ Entrant(s)

(END)

EFFECTIVE DATE

Pursuant to s. 227.22 (2)(intro.), Stats., these rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register.

CODES6:123



Tommy G. Thompson
Governor
Carol Skornicka
Secretary



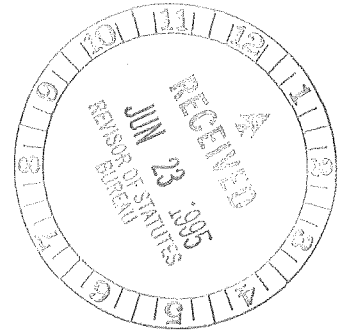
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State of Wisconsin Department of Industry, Labor and Human Relations

June 21, 1995

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Suite 800
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Madison, Wisconsin 53703-3233

Douglas LaFollette
Secretary of State
10th Floor
30 West Mifflin Street
Madison, Wisconsin 53703



Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE NO. 94-163

RULE NO. Chapters ILHR 31 and 32

RELATING TO: Public Employee Safety and Health

Pursuant to section 227.20, Stats., agencies are required to file a certified copy of every rule adopted by the agency with the offices of the Secretary of State and the Revisor of Statutes.

At this time, the following material is being submitted to you:

1. Order of Adoption.
2. Rules Certificate Form.
3. Rules in Final Draft Form.

Pursuant to section 227.114, Stats., a summary of the final regulatory flexibility analysis is included for permanent rules. A fiscal estimate and fiscal estimate worksheet is included with an emergency rule.

Respectfully submitted,


Carol Skornicka
Secretary