

# DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

## DIRECTOR'S OFFICE

### OCCUPATIONAL HEALTH STANDARDS

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 14 and 24 of 1974 PA 154, MCL 408.1014 and 408.1024, and Executive Reorganization Order Nos. 1996-1, 1996-2, 2003-1, 2008-4, and 2011-4, MCL 330.3101, 445.2001, 445.2011, 445.2025, and 445.2030.)

### PART 304 ETHYLENE OXIDE

#### **R 325.51151 Scope and application.**

Rule 1. (1) These rules apply to all occupational exposures to ethylene oxide (EtO), chemical abstracts service registry no. 75-21-8, except that these rules do not apply to the processing, use, and handling of products that contain EtO if objective data are reasonably relied upon to demonstrate that the product is not capable of releasing EtO in airborne concentrations at or above the action level and that it cannot reasonably be foreseen that the product will release EtO in excess of the short-term exposure limit (STEL) under the expected conditions of processing, use, and handling that will cause the greatest possible release.

(2) An employer who relies on the product exemption of this rule shall maintain records of the objective data supporting that exemption and of the basis of the employer's reliance on the data, as provided in R 325.51171.

History: 1988 AACCS; 1993 AACCS.

#### **R 325.51151a. Reference of standards.**

Rule 1a. (1) The following Michigan occupational safety and health standards are referenced in these rules. Up to 5 copies of these standards may be obtained at no charge from the Michigan Department of Licensing and Regulatory Affairs, MIOSHA Regulatory Services Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909-8143, or via the internet at website: [www.michigan.gov/mioshastandards](http://www.michigan.gov/mioshastandards). For quantities greater than 5, the cost, at the time of adoption of these rules, is 4 cents per page.

(a) Construction Safety Standard Part 18 "Fire Protection and Prevention," R 408.41801 to R 408.41884.

(b) General Industry Safety Standard Part 6 "Fire Exits," R 408.10601 to R 408.10697.

(c) General Industry Safety Standard Part 33 "Personal Protective Equipment," R 408.13301 to R 408.13398.

(d) Occupational Health Standard Part 430 "Hazard Communication." R 325.77001 to R 325.77003.

(e) Occupational Health Standard Part 433 "Personal Protective Equipment," R 325.60001 to R 325.60013.

(f) Occupational Health Standard Part 451 "Respiratory Protection," R 325.60051 to R 325.60052.

(g) Occupational Health Standard Part 470 "Employee Medical Records and Trade Secrets," R 325.3451 to R 325.3476.

(2) Appendices A to D to these rules are informational and are not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

History: 2015 AACCS.

### **R 325.51152. Definitions.**

Rule 2. (1) As used in these rules:

(a) "Act" means Michigan occupational safety and health act of 1974 PA 154, MCL 408.1001 to MCL 408.1094.

(b) "Action level" means a concentration of EtO of 0.5 parts EtO per million parts of air (0.5 ppm) calculated as an 8-hour, time-weighted average.

(c) "Authorized person" means any person specifically authorized by the employer whose duties require the person to enter a regulated area, any person entering such an area as a designated representative of employees for the purpose of exercising the right to observe monitoring procedures under R 325.51176, or any other person authorized by the act.

(d) "Director" means the director of the Michigan department of licensing and regulatory affairs or his or her designee.

(e) "Emergency" means any occurrence which is likely to or does result in an unexpected release of ethylene oxide, such as equipment failure, rupture of containers, or failure of control equipment.

(f) "Employee exposure" means exposure to airborne EtO that would occur if the employee were not using respiratory protective equipment.

(g) "Ethylene oxide" or "EtO" means a 3-membered ring organic compound, chemical formula C<sub>2</sub>H<sub>4</sub>O.

History: 1988 AACCS; 2000 AACCS; 2015 AACCS.

### **R 325.51153 Airborne concentrations; permissible employee exposure limits.**

Rule 3. (1) An employer shall ensure that an employee is not exposed to an airborne concentration of EtO of more than 1 part EtO per million parts of air (1 ppm) as an 8-hour, time-weighted average (TWA).

(2) An employer shall ensure that an employee is not exposed to an airborne short-term exposure limit (STEL) concentration of EtO of more than 5 ppm as averaged over any 15-minute period during the working day.

History: 1988 AACCS; 1993 AACCS.

**R 325.51154 Exposure monitoring generally.**

Rule 4. (1) Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA and 15-minute STEL of each employee.

(2) Representative 8-hour TWA employee exposures shall be determined on the basis of 1 or more samples that represent full-shift exposure for each shift for each job classification in each work area. Representative 15-minute short-term employee exposures shall be determined on the basis of 1 or more samples that represent 15-minute exposures associated with operations that are most likely to produce exposures above the excursion limit for each shift for each job classification in each work area.

(3) If an employer can document that exposure levels are equivalent for similar operations in different work shifts, the employer need only determine representative employee exposure for that operation during 1 shift.

History: 1988 AACCS; 1993 AACCS.

**R 325.51155 Exposure monitoring; initial determination.**

Rule 5. (1) An employer who has a workplace or work operation that is subject to these rules shall perform initial monitoring to accurately determine the TWA and STEL airborne concentrations of EtO to which an employee may be exposed.

(2) Any measurements of airborne EtO concentrations that are determined after June 15, 1983, may be used to satisfy the requirement to monitor specified in subrule (1) of this rule, if the sampling and analytical methods that are used meet the accuracy and confidence levels required by R 325.51157.

(3) If an employer has previously monitored for the STEL by sampling and analytic methods that meet the accuracy and confidence levels of R 325.51157, the employer may rely on the monitoring results to satisfy the requirements of subrule (1) of this rule.

History: 1988 AACCS; 1993 AACCS.

**R 325.51156. Exposure monitoring; frequency.**

Rule 6. (1) If the monitoring required by R 325.51155 reveals employee exposure to be at or above the action level, but below the 8-hour TWA, an employer shall repeat such monitoring for each such employee at least every 6 months.

(2) If monitoring required by R 325.51155 reveals that employee exposure is above the 8-hour TWA, an employer shall repeat such monitoring for each affected employee at least every 3 months.

(3) The employer may alter the monitoring schedule from quarterly to semiannually for any employee for whom 2 consecutive measurements, taken not less than 7 days apart, indicate that the employee's exposure has decreased to or below the 8-hour TWA.

(4) If there has been a production, process, control equipment, personnel, or work practice change that might result in new or additional employee exposure to EtO, or if an employer has any other reason to suspect a change that might result in new or additional

exposures to EtO, the employer shall institute additional monitoring pursuant to this standard.

History: 1988 AACCS; 1993 AACCS; 2015 AACCS.

**R 325.51156a. Termination of monitoring, ‘action level,’ excursion limit.**

Rule 6a. (1) If the initial monitoring required by R 325.51155 reveals employee exposure to be below the action level, the employer may discontinue TWA monitoring for those employees whose exposures are represented by the initial monitoring.

(2) If the periodic monitoring required by R 325.51156 reveals that employee exposures, as indicated by at least 2 consecutive measurements taken at least 7 days apart, are below the action level, the employer may discontinue TWA monitoring for those employees whose exposures are represented by such monitoring.

(3) If the initial monitoring required by R 325.51155 reveals employee exposure to be at or below the excursion limit, the employer may discontinue excursion limit monitoring for those employees whose exposures are represented by the initial monitoring.

(4) If the periodic monitoring required by R 325.51156 reveals that employee exposures, as indicated by at least 2 consecutive measurements taken at least 7 days apart, are at or below the excursion limit, the employer may discontinue excursion limit monitoring for those employees whose exposures are represented by such monitoring.

History: 2015 AACCS.

**R 325.51157 Exposure monitoring; accuracy of measurement.**

Rule 7. An employer shall use a method of monitoring which is accurate, to a confidence level of 95%, to within plus or minus 25% for airborne concentrations of EtO at the 1 ppm TWA, to within plus or minus 35% for airborne concentrations of EtO at the action level of 0.5 ppm, and to within plus or minus 35% for airborne concentrations of EtO at the 5 ppm STEL.

History: 1988 AACCS.

**R 325.51158. Employee notification of monitoring results.**

Rule 8. (1) The employer must, within 15 working days after the receipt of the results of any monitoring results, notify each affected employee of the results, either individually in writing, or by posting the results in an appropriate location that is accessible to affected employees.

(2) If the monitoring results indicate that employee exposure, without regard to respirators, exceeds 1 or both of the permissible employee exposure limits, an employer shall include, in the written notice required by subrule (1) of this rule, a statement that the permissible employee exposure limit was exceeded and a description of the corrective action taken or to be taken to reduce exposure to or below the permissible employee exposure limit.

History: 1988 AACS; 2015 AACS.

**R 325.51159 Regulated areas.**

Rule 9. (1) An employer shall establish a regulated area wherever employee exposure to airborne concentrations of EtO may exceed either of the permissible employee exposure limits specified in R 325.51153.

(2) Access to regulated areas shall be restricted to authorized persons.

(3) A regulated area shall be demarcated in any manner that minimizes the number of employees within the regulated area.

History: 1988 AACS; 1993 AACS.

**R 325.51160 Methods of compliance; engineering controls and work practices.**

Rule 10. (1) An employer shall institute engineering and work practice controls to reduce and maintain employee exposures to EtO to or below the permissible exposure limits, except to the extent that such controls are not feasible.

(2) If the engineering and work practice controls that can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limits, an employer shall nonetheless use them to reduce exposures to the lowest levels achievable by these controls and shall supplement the controls by the use of respiratory protection which complies with the requirements of R 325.51162.

(3) Engineering controls are generally infeasible for the following operations:

(a) Collection of quality assurance sampling from sterilized materials.

(b) Removal of biological indicators from sterilized materials.

(c) Loading and unloading of tank cars.

(d) Changing of ethylene oxide tanks on sterilizers.

(e) Vessel cleaning.

(4) Engineering controls are required for operations in subrule (3) of this rule where the director demonstrates that such controls are feasible.

(5) Employee job rotation shall not be used as a means of compliance with the permissible exposure limits.

History: 1988 AACS.

**R 325.51161 Methods of compliance; written compliance program.**

Rule 11. (1) If the TWA or STEL exposure limits are exceeded, an employer shall establish and implement a written compliance program to reduce and maintain employee exposures at or below the permissible employee exposure limits prescribed by R 325.51153(1) and (2) solely by means of engineering and work practice controls pursuant to 325.51160 and by the use of respiratory protection where required or permitted by R 325.51162.

(2) The written compliance program shall, at a minimum, include both of the following:

(a) A schedule for periodic leak detection surveys.

(b) A written plan for emergency situations pursuant to R 325.51164.

(3) Written compliance programs shall be submitted, upon request, to the director and shall be available at the workplace for examination and copying by the director, an affected employee, or an authorized employee representative.

(4) A written compliance program shall be reviewed and updated at least once every 12 months to reflect the current status of the compliance program.

History: 1988 AACCS; 1993 AACCS.

### **R 325.51162. Respirators; selection; respiratory protection program.**

Rule 12 (1) For employees who use respirators required by these rules, the employer shall select and provide each employee an appropriate respirator that complies with the requirements of these rules. Respirators must be used during all of the following:

(a) Periods necessary to install or implement feasible engineering and work practice controls.

(b) Work operations, such as maintenance and repair activities and vessel cleaning for which engineering and work practice controls are not feasible.

(c) Work operations for which feasible engineering and work practice controls are not yet sufficient to reduce an employee's exposure to or below the TWA.

(d) Emergencies.

(2) For respirator selection, an employer must do all of the following:

(a) Select, and provide to employees, the appropriate respirators in accordance with Occupational Health Standard Part 451 "Respiratory Protection," as referenced in R 325.51151a, however, an employer must not select or use half masks of any type because EtO may cause eye irritation or injury.

(b) Equip each air-purifying, full facepiece respirator with a front-or back-mounted canister approved for protection against ethylene oxide.

(c) For escape, provide employees with any respirator permitted for use under subdivisions (a) and (b) of this subrule.

(3) The employer must implement a respiratory protection program in accordance with Occupational Health Standard Part 451 "Respiratory Protection," as referenced in R 325.51151a, which covers each employee required by this rule to use a respirator.

History: 1988 AACCS; 1993 AACCS; 2000 AACCS; 2015 AACCS.

### **R 325.51163. Protective clothing and equipment.**

Rule 13. If it is possible that employees could have eye or skin contact with EtO or EtO solutions, then the employer must select and provide, at no cost to the employee, appropriate protective clothing or other equipment in accordance with General Industry Safety Standard Part 33 "Personal Protective Equipment," and Occupational Health Standard Part 433 "Personal Protective Equipment," and as referenced in R 325.51151a, to protect any area of the employee's body that may come in contact with the EtO or EtO

solution, and must ensure that the employee wears the protective clothing and equipment provided.

History: 1988 AACCS; 2000 AACCS; 2015 AACCS.

**R 325.51164. Emergency situations; written plans; alerting employees.**

Rule 14. (1) The employer shall develop a written plan for emergency situations for each workplace where EtO is used. The employer shall implement appropriate portions of the plan in the event of an emergency.

(2) The plan shall specifically provide that an employee who is engaged in correcting emergency conditions shall be equipped with respiratory protection as required in R 325.51162 until the emergency has abated.

(3) The plan shall include the elements prescribed in the provisions of Construction Safety Standard Part 18 Fire Protection and Prevention and General Industry Safety Standard Part 6 Fire Exits, as referenced in R 325.51151a.

(4) Where there is the possibility of employee exposure to EtO due to an emergency, the employer shall develop and use means to promptly alert potentially affected employees of such occurrences.

(5) Affected employees who are not engaged in correcting the emergency shall be immediately evacuated from the area and shall not be permitted to return until the emergency has abated.

History: 1988 AACCS; 2015 AACCS.

**R 325.51165 General medical surveillance.**

Rule 15. (1) An employer shall institute a medical surveillance program for each employee who is or may be exposed to concentrations of EtO at or above the action level or short-term exposure limit, without regard to the use of respirators, for at least 30 days a year.

(2) An employer shall make available medical examinations and consultations to all employees who have been exposed to EtO in an emergency situation.

(3) The employer shall ensure that all medical examinations and procedures are performed by, or under the supervision of, a licensed physician.

(4) An employer shall ensure that the required medical surveillance is provided without cost to employees, without loss of pay, and at a reasonable time and place.

History: 1988 AACCS.

**R 325.51166. Medical examinations and consultation; frequency and content.**

Rule 16. (1) An employer shall make medical examinations and consultations available to each employee covered in R 325.51165 as follows:

(a) Before assignment to a work area where exposure may be at or above the action level or short-term exposure limit for at least 30 days a year.



(b) At least annually each employee exposed at or above the action level for at least 30 days in the past year.

(c) At termination of employment or reassignment to an area where exposure to EtO is not at or above the action level or short-term exposure limit for at least 30 days a year.

(d) As medically appropriate for any employee exposed in an emergency.

(e) As soon as possible after notification by an employee that the employee has developed signs or symptoms indicating possible overexposure to EtO or that the employee desires medical advice concerning the effects of current or past exposure to EtO on the employee's ability to produce a healthy child.

(f) An employer shall provide additional medical examinations to affected employees at the frequency recommended by the examining physician.

(2) Medical examinations made available pursuant to subrule (1) of this rule shall include all of the following:

(a) A medical and work history, with emphasis given to eyes, skin, and pulmonary, hematologic, neurologic, and reproductive systems.

(b) A physical examination with emphasis given to eyes, skin, and pulmonary, hematologic, neurologic, and reproductive systems.

(c) A complete blood count, including at least a white cell count with differential, red cell count, hematocrit, and hemoglobin.

(d) Additional tests which, in the opinion of the examining physician, are appropriate.

(e) Pregnancy testing or laboratory evaluation of fertility shall be provided if requested by the employee and deemed appropriate by the physician.

History: 1988 AACCS; 2015 AACCS.

**R 325.51167. Medical surveillance program; information provided to the physician by employer.**

Rule 17. An employer shall provide all of the following information to the examining physician:

(a) A copy of these rules and related appendices which may be obtained from the department of licensing and regulatory affairs.

(b) A description of an affected employee's duties as they relate to the employee's exposure.

(c) The employee's representative or anticipated exposure level.

(d) A description of any personal protective equipment used or to be used.

(e) Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

History: 1988 AACCS; 2015 AACCS.

**R 325.51168 Medical surveillance program; physician's written opinion.**

Rule 18. (1) An employer shall obtain a written opinion from the examining physician, which shall include all of the following information:

(a) The results of the medical examination and tests performed.



(b) The physician's opinion as to whether an employee has any detected medical condition or conditions which would subject the employee to an increased risk of material health impairment from exposure to EtO.

(c) Any recommended limitations on the employee or upon the use of personal protective equipment, such as clothing or respirators.

(d) A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions resulting from EtO exposure that require further examination or treatment.

(2) An employer shall instruct the physician not to reveal specific findings or diagnoses unrelated to occupational exposure to EtO in the written opinion.

(3) Within 15 days of receipt, an employer shall provide a copy of the written opinion to the affected employee.

History: 1988 AACCS.

### **R 325.51168a. Hazard communication.**

Rule 18a. (1) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Occupational Health Standard Part 430 "Hazard Communication," as referenced in R 325.51151a, for EtO.

(2) In classifying the hazards of EtO, at least all of the following hazards shall be addressed:

- (a) Cancer.
- (b) Reproductive effects.
- (c) Mutagenicity.
- (d) Central nervous system.
- (e) Skin sensitization.
- (f) Skin.
- (g) Eye and respiratory tract irritation.
- (h) Acute toxicity effects.
- (i) Flammability.

(3) An employer shall include EtO in the hazard communication program established to comply with the Occupational Health Standard Part 430 "Hazard Communication." An employer shall ensure that each employee has access to labels on containers of EtO and to safety data sheets, and is trained in accordance with the requirements R 325.51170 and Occupational Health Standard Part 430 "Hazard Communication," as referenced in R 325.51151a.

History: 1988 AACCS; 2015 AACCS.

### **R 325.51169. Signs and labels.**

Rule 19. (1) An employer shall post and maintain legible signs demarcating regulated areas and entrances or access ways to regulated areas that bear the following legend:

DANGER  
ETHYLENE OXIDE  
MAY CAUSE CANCER  
MAY DAMAGE FERTILITY OR THE UNBORN CHILD  
RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING MAY BE  
REQUIRED IN THIS AREA AUTHORIZED PERSONNEL ONLY

(2) Prior to June 1, 2016, an employer may use the following legend in lieu of that specified in subrule (1) of this rule:

DANGER  
ETHYLENE OXIDE  
CANCER HAZARD AND REPRODUCTIVE HAZARD  
AUTHORIZED PERSONNEL ONLY  
RESPIRATORS AND PROTECTIVE CLOTHING MAY BE REQUIRED TO BE  
WORN IN THIS AREA

(3) The employer shall ensure that labels are affixed to all containers of EtO whose contents are capable of causing employee exposure at or above the action level or whose contents may reasonably be foreseen to cause employee exposure above the excursion limit, and shall ensure that the labels remain affixed when the containers of EtO leave the workplace. For the purposes of this subrule; reaction vessels, storage tanks, and pipes or piping systems are not considered to be containers.

(4) Prior to June 1, 2015, an employer may include the following information on containers of EtO in lieu of the labeling requirements in subrule (1) of this rule:

(a)

DANGER  
CONTAINS ETHYLENE OXIDE  
CANCER HAZARD AND REPRODUCTIVE  
HAZARD

(b) A warning statement against breathing airborne concentrations of EtO.

(5) The labeling requirements of this rule do not apply where EtO is used as a pesticide, as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §136 et seq., when it is labeled pursuant to that act and regulations issued under the act by the environmental protection agency.

History: 1988 AACCS; 2015 AACCS.

### **R 325.51170 Employee information and training.**

Rule 20. (1) An employer who has a workplace in which there is a potential exposure to airborne EtO at or above the action level or above the STEL shall provide employees with information and training on EtO at the time of initial assignment and at least annually for each employee.

(2) An employer shall ensure that each employee is informed of all of the following:

(a) The location, availability, and contents of these rules and appendices A and B to these rules.

(b) The specific nature of any operations in the employee's work area where EtO is present.

(c) The purpose and description of the medical surveillance program required in R 325.51165 to R 325.51168 and an explanation of the information in appendix C to these rules.

(3) An employer shall institute a training program that shall include all of the following areas:

(a) Methods and observations that may be used to detect the presence or release of EtO in the work area.

(b) The physical and health hazards of EtO.

(c) The engineering controls, work practices, personal protective equipment, and emergency procedures used to protect employees.

(d) The details of the hazard communication program developed by the employer, including an explanation of the labeling system and how employees can obtain and use appropriate hazard information.

History: 1988 AACCS; 1993 AACCS.

### **R 325.51171 Recordkeeping; objective data for exempted operations.**

Rule 21. (1) If the processing, use, and handling of products made from or containing EtO are exempted pursuant to R 325.51151, or where objective data have been relied on instead of initial monitoring pursuant to R 325.51155(2), an employer shall establish and maintain an accurate record of the objective data reasonably relied upon in support of the exemption, which shall include all of the following information:

(a) The product qualifying for exemption.

(b) The source of the objective data.

(c) The testing protocol and the results of the testing or an analysis of the material, or both, for the release of EtO.

(d) A description of the operation exempted and how the data supports the exemption.

(e) Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.

(2) An employer shall maintain the record specified in subrule (1) of this rule for the duration of the employer's reliance upon such objective data.

History: 1988 AACCS.

### **R 325.51172. Monitoring of exposure; records; maintenance.**

Rule 22. (1) An employer shall establish and maintain an accurate record of all monitoring required by R 325.51154 to R 325.51156. The exposure monitoring record shall include all of the following information:

(a) The dates, number, duration, and results of each of the samples taken, including a description of the sampling plan used to determine representative employee exposure.

(b) The operation involving exposure to EtO that is being monitored.

(c) A description of the sampling and analytical methods used and the data relied upon to establish that the methods used meet the accuracy and precision requirements of R 325.51157.

(d) Type of protective devices worn, if any.

(e) Name, social security number, and job classification of the employee being monitored and of all other employees whose exposure the measurement is intended to represent.

(2) An employer shall maintain the record specified in subrule (1) of this rule for not less than 30 years in accordance with the provisions of Occupational Health Standard Part 470 “Employee Medical Records and Trade Secrets,” as referenced in R 325.51151a.

History: 1988 AACCS; 1993 AACCS; 2015 AACCS.

**R 325.51173. Medical surveillance records; maintenance.**

Rule 23. (1) An employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by R 325.51165. The medical surveillance record shall include all of the following information:

(a) The name and social security number of the employee.

(b) A copy of the physician's written opinions.

(c) Any employee medical complaints related to exposure to EtO.

(d) A copy of the information provided to the physician as required by R 325.51167.

(2) An employer shall ensure the record is maintained for the duration of employment plus 30 years in accordance with the provisions of Occupational Health Standard Part 470 “Employee Medical Records and Trade Secrets,” as referenced in R 325.51151a.

History: 1988 AACCS; 1993 AACCS; 2015 AACCS.

**R 325.51174. Availability of records**

Rule 24. (1) Upon written request, an employer shall make all records that are required to be maintained by these rules available to the director for examination and copying.

(2) Upon request, an employer shall make records that are required to be maintained by R 325.51171, R 325.51172, and R 325.51173 available to affected employees, former employees, and designated representatives for examination and copying in accordance with the provisions of Occupational Health Standard Part 470 “Employee Medical Records and Trade Secrets,” as referenced in R 325.51151a.

(3) An employer shall make records that are required to be maintained by R 325.51173 available for examination and copying to anyone who has the specific written consent of the affected employee or former employee.

History: 1988 AACCS; 1993 AACCS; 2015 AACCS.

**R 325.51175. Transfer of records.**

Rule 25. The employer shall comply with the requirements concerning transfer of records set forth in Occupational Health Standard Part 470 “Employee Medical Records and Trade Secrets,” as referenced R 325.51151a.

History: 1988 AACS; 2015 AACS.

**R 325.51176 Exposure monitoring; employee observation.**

Rule 26. (1) An employer shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to EtO which is conducted pursuant to R 325.51154 to R 325.51156.

(2) When observation of the monitoring of employee exposure to EtO requires entry into an area where the use of protective clothing or equipment is required, the observer shall be provided with and be required to use such clothing and equipment and shall comply with all other applicable safety and health procedures.

History: 1988 AACS.

**R 325.51177 Rescinded.**

History: 1988 AACS; 1993 AACS; 2000 AACS; 2015 AACS.