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 section 24 of 1974 PA 154, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030)

PART 308. INORGANIC ARSENIC (As)

R 325.51601 Applicability.

Rule 601. These rules apply to all occupational exposures to inorganic arsenic, except that they do not apply to employee exposures in agriculture or to exposures that result from pesticide application, the treatment of wood with preservatives, or the use of arsenically preserved wood.

History: 1980 AACS; 1993 AACS.

R 325.51601a MIOSHA standards by reference.

Rule 601a. (1) The following Michigan occupational safety and health administration (MIOSHA) 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 Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, MI, 48909-8143 or via the internet at website: 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) General Industry Safety Standard Part 33 "Personal Protective Equipment," R 408.13301 to R 408.13398.
- (b) Occupational Health Part 430 "Hazard Communication," R 325.77001 to R 325.77003.
- (c) Occupational Health Part 451 "Respiratory Protection," R 325.60051 to R 325.60052.
- (d) Occupational Health Part 470 "Employee Medical Records and Trade Secrets," R 325.3451 to R 325.3476.
 - (e) Occupational Health Part 474 "Sanitation," R 325.47401 to R 325.47425.
- (2) The information contained in the appendices to these rules are not intended by itself, to create any additional obligations not otherwise imposed by this standard nor detract from any existing obligation.

History: 2014 AACS.

R 325.51602 Definitions.

Rule 602. As used in these rules:

- (a) "Act" means 1974 PA 154, MCL §408.1001 to 408.1094.
- (b) "Action level" means a concentration of inorganic arsenic of 5 micrograms per cubic meter of air (5 ug/m⁽³⁾) averaged over any 8-hour period.
- (c) "Authorized person" means a person who is specifically required by the employer to enter a regulated area or a person who enters such an area as a designated representative of employees for the purpose of observing the monitoring and measuring procedures under R 325.51627.
- (d) "Department" means the department of licensing and regulatory affairs.
 - (e) "Director" means the director of the department or his or her designee.
- (f) "Inorganic arsenic" means elemental arsenic, copper acetoarsenite, and all inorganic compounds containing arsenic, except arsine, measured as arsenic (As).

History: 1980 AACS; 2000 AACS; 2014 AACS.

R 325.51603 Employee exposure limits; skin or eye contact.

Rule 603. (1) An employer shall assure that an employee is not exposed to inorganic arsenic at concentrations of more than 10 ug/m3, averaged over any 8-hour period.

(2) An employer shall assure that an employee is not exposed to skin or eye contact with arsenic trichloride or to skin or eye contact with liquid or particulate inorganic arsenic which is likely to cause skin or eye irritation.

History: 1980 AACS.

R 325.51604 Rescinded.

History: 1980 AACS; 2014 AACS.

R 325.51605 Employee exposure; determination of airborne exposure levels; collection of samples; monitoring and measurement accuracy; written notice to employee of exposure level.

Rule 605. (1) For the purpose of these rules, employee exposure is that exposure which would occur if an employee were not using a respirator.

- (2) A determination of airborne exposure levels shall be made from air samples that are representative of an employee's exposure to inorganic arsenic over an 8-hour period.
- (3) The employer shall collect full shift personal samples for not less than 7 continuous hours which shall include at least 1 sample for each shift for each job classification and work area.
- (4) An employer shall use a method of monitoring and measurement which has an accuracy of not less than plus or minus 25% for concentrations of inorganic arsenic of more than or equal to 10 micrograms per cubic meter (10 ug/m³) with a confidence level of 95%.

- (5) An employer shall use a method of monitoring and measurement which has an accuracy of not less than plus or minus 35% for concentrations of inorganic arsenic of more than 5 micrograms per cubic meter (5 ug/m3) but less than 10 micrograms per cubic meter (10 ug/m3) with a confidence level of 95%.
- (6) The employer shall, within 15 working days after the receipt of the results of any monitoring performed under these rules, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to affected employees.
- (7) If the results indicate that the representative employee exposure exceeds the permissible exposure limit, the employer shall include in the written notice a statement that the permissible exposure limit was exceeded and a description of the corrective action taken to reduce exposure to or below the permissible exposure limit.

History: 1980 AACS; 2014 AACS.

R 325.51606 Employee exposure; monitoring exposure below action level, above permissible limit, and above action level but below permissible limit; duration of monitoring; additional monitoring.

Rule 606. (1) An employer who has a workplace or work operation that is subject to these rules shall monitor each workplace or work operation to accurately determine the airborne concentration of inorganic arsenic to which an employee may be exposed.

- (2) If the initial monitoring reveals an employee exposure to be below the action level, the measurements need not be repeated, except as otherwise provided in subrule (6) of this rule.
- (3) If the initial monitoring or subsequent monitoring reveals employee exposure to be above the permissible exposure limit, an employer shall repeat monitoring at least once every 3 months.
- (4) If the initial monitoring or subsequent monitoring reveals employee exposure to be above the action level and below the permissible exposure limit, an employer shall repeat monitoring at least once every 6 months.
- (5) An employer shall continue monitoring at the required frequency until not less than 2 consecutive measurements, taken not less than 7 days apart, are below the action level. When the measurements are obtained, the employer may discontinue monitoring for that employee until such time as any of the events in subrule (6) of this rule occur.
- (6) If a production process, control, or personnel change is made that might result in new or additional exposure to inorganic arsenic, or if an employer has any other reason to suspect a change that might result in new or additional employee exposure to inorganic arsenic, additional monitoring that is in compliance with R 325.51605 and this rule shall be conducted.

History: 1980 AACS; 1993 AACS; 2014 AACS.

R 325.51607 Regulated areas; establishment; demarcation and segregation; access; respiratory protection; prohibited activities.

- Rule 607. (1) An employer shall establish a regulated area where worker exposure to inorganic arsenic is in excess of the permissible limit, without regard to the use of a respirator.
- (2) A regulated area shall be demarcated and segregated from the rest of the workplace in a manner that minimizes the number of persons who will be exposed to inorganic arsenic.
- (3) Access to a regulated area shall be limited to authorized persons or to persons who are otherwise authorized to enter such areas by the act or the rules promulgated pursuant thereto.
- (4) A person entering a regulated area shall be supplied with a respirator which is selected pursuant to R 325.51611.
- (5) In a regulated area, an employer shall assure that neither food nor beverages are consumed, that smoking products, chewing tobacco, and gum are not used, and that cosmetics are not applied, except that these activities may be conducted in lunchrooms, change rooms, and showers required by R 325.51616. Drinking water may be consumed in the regulated area.

History: 1980 AACS.

R 325.51608 Engineering and work practice controls to reduce employee exposure.

Rule 608. (1) Where monitoring establishes that employees are exposed to airborne concentrations of inorganic arsenic which are above the established permissible exposure limit, an employer shall institute, at the earliest possible time, engineering and work practice controls to reduce exposures to or below the permissible exposure limit, except to the extent that the employer can establish that such controls are not feasible.

(2) If engineering and work practice controls are not sufficient to reduce exposures to or below the permissible exposure limit, they shall nonetheless be used to reduce exposures to the lowest levels achievable by these controls and shall be supplemented by the use of respirators, pursuant to R 325.51610 to R 325.51613, and other necessary personal protective equipment. Employee rotation is not required as a control strategy before respiratory protection is instituted.

History: 1980 AACS.

R 325.51609 Employee exposure; written programs to reduce exposure by means of engineering and work practice controls; content; availability; revision and update.

Rule 609. (1) An employer shall establish and implement a written program to reduce exposures to or below the permissible exposure limit by means of engineering and work practice controls.

- (2) A written program shall include, at a minimum, all of the following:
- (a) A description of each operation in which inorganic arsenic is emitted; for example, machinery used, material processed, controls in place, crew size, operating

procedures, and maintenance practices.

- (b) Engineering plans and studies used to determine the methods selected for controlling exposure to inorganic arsenic.
 - (c) A report of the technology considered in meeting the permissible exposure limit.
 - (d) Monitoring data.
- (e) A detailed schedule for the implementation of the engineering controls and work practices which cannot be implemented immediately and for the adaption and implementation of any additional engineering and work practices which are necessary to meet the permissible exposure limit.
- (f) If an employer currently does not achieve the permissible exposure limit with engineering controls and work practices, the employer shall include an analysis of the effectiveness of the various controls in the written program and implement a plan to minimize the discomfort and maximize the effectiveness of respirator use.
 - (g) Other relevant information.
- (3) The written program shall be submitted, upon request, to the director and shall be available to the director, affected employees, or authorized employee representatives at the worksite for examination and copying.
- (4) The program required by this rule shall be revised and updated at least annually to reflect the current status of the program.

History: 1980 AACS; 2014 AACS.

R 325.51610 Respirators; use.

- Rule 610. (1) For employees who use respirators required by these rules, the employer shall provide each employee an appropriate respirator that complies with the requirements of this rule.
 - (2) Respirators shall be used during all of the following:
- (a) Periods necessary to install or implement feasible engineering or work practice controls.
- (b) Work operations, such as maintenance and repair activities, for which the employer establishes that engineering and work practice controls are not feasible.
- (c) Work operations for which engineering and work practice controls are not yet sufficient to reduce employee exposures to or below the permissible exposure limit.
 - (d) Emergencies.

History: 1980 AACS; 1998-2000 AACS; 2014 AACS.

R 325.51611 Respirator program.

- Rule 611. (1) The employer shall implement a respiratory protection program in accordance with Occupational Health Standard Part 451 "Respiratory Protection," as referenced in R 325.51601a, which covers each employee required by these rules to use a respirator.
- (2) If an employee exhibits breathing difficulty during fit testing or respirator use, then the employee shall be examined by a physician trained in pulmonary medicine to determine whether the employee can use a respirator while performing the required duty.

History: 1980 AACS; 1993 AACS; 2000 AACS; 2014 AACS.

R 325.51611a Respirator selection.

Rule 611a. (1) An employer shall 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 in R 325.51601a.
- (b) Ensure that employees do not use half mask respirators for protection against arsenic trichloride because it is absorbed rapidly through the skin.
 - (c) Provide HEPA filters for powered and non-powered air-purifying respirators.
 - (d) Select for employee use both of the following:
- (i) Air-purifying respirators that have a combination HEPA filter with an appropriate gas-sorbent cartridge or canister when the employee's exposure exceeds the permissible exposure level for inorganic arsenic and the relevant limit for other gases.
- (ii) Front-or back-mounted gas masks equipped with HEPA filters and acid gas canisters or any full facepiece supplied-air respirators when the inorganic arsenic concentration is at or below 500 mg/m3; and half mask air-purifying respirators equipped with HEPA filters and acid gas cartridges when the inorganic arsenic concentration is at or below 100 μg/m3.
- (2) Employees required to use respirators may choose, and the employer shall provide, a powered air-purifying respirator if it will provide proper protection. In addition, the employer shall provide a combination dust and acid-gas respirator to employees who are exposed to gases over the relevant exposure limits.

History: 2014 AACS.

R 325.51612 Rescinded.

History: 1980 AACS; 2000 AACS.

R 325.51613 Rescinded.

History: 1980 AACS; 2000 AACS.

R 325.51614 Protective work clothing and equipment; provision and use; cleaning and replacement; notice to cleaning or laundering persons of the potentially harmful effects of exposure to inorganic arsenic.

- Rule 614. (1) If the possibility of skin or eye irritation from inorganic arsenic exists, and for all employees working in a regulated area, an employer shall provide, at no cost to the employee, and shall assure that employees use, appropriate and clean protective work clothing and equipment, such as the following:
 - (a) Coveralls or similar full-body work clothing.

- (b) Gloves and shoes or coverlets.
- (c) Face shields or vented goggles if necessary to prevent eye irritation. Such shields or goggles shall comply with General Industry Safety Standard Part 33 "Personal Protective Equipment," as referenced in R 325.50601a.
- (d) Impervious clothing for employees who are subject to exposure to arsenic trichloride.
- (2) An employer shall provide the protective clothing that is required in subrule (1) of this rule in a freshly laundered and dry condition at least once each week. If an employee works in an area where the exposure to inorganic arsenic is over 100 micrograms per cubic meter (100 ug/m³) or in an area where more frequent washing is needed to prevent skin irritation, then the protective clothing shall be laundered daily.
- (3) An employer shall clean, launder, or dispose of protective clothing that is required by subrule (1) of this rule.
- (4) An employer shall repair or replace the protective clothing and equipment as necessary to maintain the effectiveness of the protective clothing and equipment.
- (5) At the completion of a work shift, an employer shall assure that all protective clothing is removed only in change rooms prescribed in R 325.51616 (1).
- (6) An employer shall assure that contaminated protective clothing which is to be cleaned, laundered, or disposed of is placed in a closed container in the change room in a manner that prevents the dispersion of inorganic arsenic outside the container.
- (7) An employer shall inform, in writing, any person who cleans or launders clothing that is required by this rule of the potentially harmful effect, including the carcinogenic effects, of exposure to inorganic arsenic.

History: 1980 AACS; 1993 AACS; 2000 AACS; 2014 AACS.

R 325.51614a Labels on contaminated protective clothing and equipment.

Rule 614a. (1) The employer shall ensure that the containers of contaminated protective clothing and equipment in the workplace or which are to be removed from the workplace are labeled and that the labels include the following information:

DANGER: CONTAMINATED WITH INORGANIC ARSENIC.

MAY CAUSE CANCER.

DO NOT REMOVE DUST BY BLOWING OR SHAKING.

DISPOSE OF INORGANIC ARSENIC CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL REGULATIONS.

(2) Prior to June 1, 2015, employers may include the following information on containers of protective clothing and equipment in lieu of the labeling requirements in subrule (1) of this rule:

CAUTION: Clothing contaminated with inorganic arsenic; do not remove dust by blowing or shaking. Dispose of inorganic arsenic contaminated wash water in accordance with applicable local State or Federal regulations.

(3) The employer shall prohibit the removal of inorganic arsenic from protective clothing or equipment by blowing or shaking.

History: 2014 AACS.

R 325.51615 Hygiene procedures; written housekeeping and maintenance plan; equipment maintenance.

Rule 615. (1) All surfaces under the employer's control shall be maintained as free of accumulations of inorganic arsenic as practicable.

- (2) Floors and other accessible surfaces that are contaminated with inorganic arsenic shall not be cleaned by the use of compressed air. Shoveling and brushing may be used only if vacuuming or other relevant methods have been tried and found to be ineffective.
- (3) If vacuuming methods are selected, the vacuums shall be used and emptied in a manner to minimize the reentry of inorganic arsenic into the workplace.
- (4) A written housekeeping plan and maintenance plan shall be established and implemented. The plan shall list the appropriate frequencies for carrying out housekeeping operations and for cleaning and maintaining dust collection equipment. The plan shall be available for inspection by the director.
- (5) Periodic cleaning of dust collection and ventilation equipment and checks of their effectiveness shall be carried out to maintain the effectiveness of the system and a notation shall be kept of the last check of effectiveness and cleaning or maintenance.

History: 1980 AACS.

R 325.51616 Hygiene facilities and practices; change rooms; showers; lavatories; lunchrooms.

Rule 616. (1) For employees who work in a regulated area or who are subject to the possibility of skin or eye irritation from inorganic arsenic, an employer shall provide clean change rooms equipped with storage facilities for street clothes and separate storage facilities for protective clothing equipment pursuant to Occupational Health Standard Part 474 "Sanitation," as referenced in R 325.50601a.

- (2) An employer shall provide shower facilities pursuant to Occupational Health Standard Part 474 "Sanitation," as referenced in R 325.50601a, and shall assure that an employee who works in a regulated area or who is subject to the possibility of skin or eye irritation from inorganic arsenic showers at the end of the work shift.
- (3) For employees who work in a regulated area, an employer shall provide lunchroom facilities which have temperature-controlled, positive pressure, filtered air supplies and which are readily accessible to employees who work in a regulated area.
- (4) An employer shall provide lavatory facilities which comply with Occupational Health Standard Part 474 "Sanitation," as referenced in R 325.50601a, and shall assure that an employee who works in the regulated area or who is subject to the possibility of skin or eye irritation from exposure to inorganic arsenic washes his or her hands and face

before eating.

- (5) For an employee who works in an area where exposure to inorganic arsenic, without regard to the use of respirators, exceeds 100 micrograms per cubic meter (100 ug/m³), an employer shall provide facilities to vacuum his or her protective clothing and to clean or change shoes worn in such areas before entering change rooms, lunchrooms, or shower rooms and shall assure their use.
- (6) If engineering controls and work practices currently reduce exposures below the permissible exposure limit for affected employees, then change room, shower, lavatory, and lunchroom facilities need not be completed until December 31, 1980.

History: 1980 AACS; 2014 AACS.

R 325.51617 Medical surveillance program generally.

Rule 617. (1) An employer shall institute a medical surveillance program for the following employees:

- (a) An employee who is or will be exposed to inorganic arsenic above the action level, without regard to the use of a respirator, for not less than 30 days per year.
- (b) An employee who has been exposed above the action level, without regard to the use of a respirator, for 30 days or more per year for a total of 10 years or more of combined employment with the employer or predecessor employers before or after the effective date of these rules. The determination of exposures before the effective date of these rules shall be based upon prior exposure records, comparison with the first measurements taken after the effective date of these rules, or comparison with records of exposures in areas with similar processes, extent of engineering controls utilized, and materials used by the employer.
- (2) An employer shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician, without cost to an employee, without loss of pay, and at a reasonable time and place.

History: 1980 AACS.

R 325.51618 Medical surveillance program; initial examinations.

Rule 618. (1) Within 60 days after the effective date of these rules, an employer shall provide an opportunity for an initial medical examination, if not already provided, to an employee who is covered by the medical provisions of these rules.

- (2) An employer shall provide an opportunity for an initial medical examination at the time of the first assignment to an area where the employee is likely to be exposed to more than the action level of inorganic arsenic for not less than 30 days per year.
 - (3) The initial medical examination shall include all of the following elements:
- (a) A work history and a medical history that shall include a smoking history and the presence and degree of respiratory symptoms, such as breathlessness, cough, sputum production, and wheezing.
 - (b) A standard posterior-anterior chest x-ray.
 - (c) A nasal and skin examination.
 - (d) Other examinations that the physician believes are appropriate because of the

employee's exposure to inorganic arsenic or because of required respirator use.

History: 1980 AACS; 1993 AACS; 2000 AACS; 2014 AACS.

R 325.51619 Medical surveillance program; periodic examination.

Rule 619. (1) An employer shall provide the examinations specified in these rules at least annually.

- (2) If a covered employee has not taken the examination specified in R 325.51618 (3) within 6 months before the termination of employment, then the employer shall provide the examination to the employee upon termination of employment.
- (3) If for any reason an employee develops signs or symptoms commonly associated with exposure to inorganic arsenic, then the employer shall provide an appropriate examination and emergency medical treatment.

History: 1980 AACS; 1993 AACS; 2000 AACS; 2014 AACS.

R 325.51620 Medical surveillance program; information provided to physician by employer.

Rule 620. An employer shall provide all of the following information to the examining physician:

- (a) A copy of these rules with appendices.
- (b) A description of the affected employee's duties as they relate to the employee's exposure.
 - (c) The employee's representative exposure level 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 which is not readily available to the examining physician.

History: 1980 AACS.

R 325.51621 Medical surveillance program; physician's written opinion; content; providing copy to employee.

Rule 621. (1) An employer shall obtain a written opinion from the examining physician which shall include all of the following:

- (a) The results of the medical examination and tests performed.
- (b) The physician's opinion as to whether the employee has any detected medical conditions which would subject the employee to an increased risk of material health impairment from exposure to inorganic arsenic.
- (c) Any recommended limitations upon the employee's exposure to inorganic arsenic or upon the use of protective clothing or equipment such as respirators.
- (d) A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further explanation or treatment.

- (2) An employer shall instruct the physician not to reveal in the written opinion specific findings or diagnoses unrelated to occupational exposure.
- (3) An employer shall provide a copy of the written opinion to the affected employee.

History: 1980 AACS.

R 325.51622 Employee information and training program; applicability; provision of information to employees; availability of rules and other materials to employees and director.

Rule 622. (1) An employer shall institute a training program for all employees who are subject to exposure to inorganic arsenic above the action level, without regard to respirator use, or for whom there is the possibility of skin or eye irritation from inorganic arsenic in accordance with the requirements of these rules. An employer shall assure that these employees participate in the training program.

- (2) The training program shall be provided at the time of initial assignment for employees specified in subrule (1) of this rule and at least annually thereafter.
 - (3) An employer shall assure that each employee is informed of all of the following:
 - (a) The information contained in appendix A to these rules.
- (b) The quantity, location, and manner of use or storage of arsenic materials, sources of exposure, and the specific nature of operations that could result in exposure to inorganic arsenic, as well as any necessary protective steps.
 - (c) The purpose, proper use, and limitation of respirators.
- (d) The purpose and a description of the medical surveillance program as required by R 325.51617 to R 325.51621.
- (e) The engineering controls and work practices that are associated with the employee's job assignment.
 - (f) These rules, which the employer shall review.
- (4) An employer shall make a copy of these rules and their appendices readily available to all affected employees.
- (5) Upon request, an employer shall provide, to the director, all materials that relate to the employee information and training program.

History: 1980 AACS; 1993 AACS; 2014 AACS.

R 325.51623 Rescinded.

History: 1980 AACS; 2014 AACS.

HAZARD COMMUNICATIONS

R 325.51623a Communication of hazards.

Rule 623a. (1) Chemical manufacturers, importers, distributors and employers shall comply with Occupational Health Part 430, "Hazard Communication," as referenced in R 325.51601a, for inorganic arsenic.

- (2) In classifying the hazards of inorganic arsenic, the employer shall address at least all of the following hazards:
 - (a) Cancer.
 - (b) Liver effects.
 - (c) Skin effects.
 - (d) Respiratory irritation.
 - (e) Nervous system effects.
 - (f) Acute toxicity effects.
- (3) Employers shall include inorganic arsenic in the hazard communication program established to comply with the Occupational Health Part 430, "Hazard Communication." Employers shall ensure that each employee has access to labels on containers of inorganic arsenic and to safety data sheets, and is trained in accordance with the requirements of R 325.51622 and Occupational Health Part 430, "Hazard Communication," as referenced in R 325.51601a,
- (4) The employer shall ensure that no statement appears on or near any sign or label required by this rule which contradicts or detracts from the meaning of the required sign or label.

History: 2014 AACS.

R 325.51623b Communication of hazards, signs.

Rule 623b. (1) The employer shall post signs demarcating regulated areas bearing the following legend:

DANGER

INORGANIC ARSENIC

MAY CAUSE CANCER DO NOT EAT, DRINK OR SMOKE

WEAR RESPIRATORY PROTECTION IN THIS AREA

AUTHORIZED PERSONNEL ONLY

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

DANGER

INORGANIC ARSENIC

CANCER HAZARD AUTHORIZED PERSONNEL ONLY

NO SMOKING OR EATING

RESPIRATOR REQUIRED

(3) The employer shall ensure that signs required by these rules are illuminated and cleaned as necessary so that the legend is readily visible.

(4) Prior to June 1, 2015, in lieu of the labeling requirements in R 325.51623a, employers may apply precautionary labels to all shipping and storage containers of inorganic arsenic, and to all products containing inorganic arsenic, bearing the following legend:

DANGER

CONTAINS INORGANIC ARSENIC

CANCER HAZARD HARMFUL IF INHALED OR SWALLOWED

USE ONLY WITH ADEQUATE VENTILATION OR RESPIRATORY PROTECTION

(5) Labels are not required when the inorganic arsenic in the product is bound in such a manner so as to make unlikely the possibility of airborne exposure to inorganic arsenic. Possible examples of products not requiring labels are semiconductors, light emitting diodes, and glass.

History: 2014 AACS.

R 325.51624 Monitoring and medical surveillance records; maintenance.

Rule 624. (1) An employer shall establish and maintain an accurate record of all monitoring required by R 325.51605 and R 325.51606, including all of the following:

- (a) The date, duration, location, and results of each sample taken, including, where applicable, a description of the sampling procedure used to determine representative employee exposure.
- (b) A description of the sampling and analytical methods used and evidence of their accuracy.
 - (c) The type of respiratory protective devices worn, if any.
- (d) Names, social security numbers, and job classifications of the employees monitored and of all other employees whose exposure the measurement is intended to represent.
- (e) The environmental variables that could affect the measurement of the employee's exposure.
- (2) An employer shall maintain the monitoring records for not less than 40 years or for the duration of employment plus 20 years, whichever period is longer.
- (3) An employer shall establish and maintain an accurate record for each employee who is subject to medical surveillance as required by R 325.51617 to R 325.51621, including all of the following:
 - (a) The name, social security number, and description of duties of the employee.
 - (b) A copy of the physician's written opinion.
- (c) Results of any exposure monitoring done for that employee and the representative exposure levels supplied to the physician.
 - (d) Any employee medical complaints related to exposure to inorganic arsenic.
- (4) An employer shall keep, or assure that the examining physician keeps, the following medical records:
- (a) A copy of the medical examination results, including medical and work histories required by R 325.51617 to R 325.51621.

- (b) A description of the laboratory procedures and a copy of any standards or guidelines used to interpret the test results or references to that information.
 - (c) The initial X-ray.
 - (d) The X-rays for the most recent 5 years.
 - (e) Any X-ray film with a demonstrated abnormality and all subsequent X-ray films.
- (5) An employer shall maintain, or assure that the physician maintains, the medical records for not less than 40 years or for the duration of employment plus 20 years, whichever period is longer.

History: 1980 AACS; 2014 AACS.

R 325.51625 Availability of records.

- Rule 625. (1) Upon request, an employer shall make all records that are required to be maintained pursuant to R 325.51624 available to the director for examination and copying.
- (2) Upon request, an employer shall make all records that are required pursuant to the provisions of R 325.51624 available to affected employees, former employees, and their designated representatives in accordance with the provisions of Occupational Health Standard Part 470, "Employee Medical Records and Trade Secrets," as referenced in R 325.50601a.

History: 1980 AACS; 1993 AACS; 2014 AACS.

R 325.51626 Retention and transfer of records.

Rule 626. (1) If an employer ceases to do business, the successor employer shall receive and retain all records that are required to be maintained by these rules.

(2) The employer shall also comply with any additional requirements involving the transfer of records set in Occupational Health Standard Part 470, "Employee Medical Records and Trade Secrets," as referenced in R 325.50601a.

History: 1980 AACS; 2014 AACS.

R 325.51627 Exposure monitoring; employee observation.

Rule 627. (1) An employer shall provide an affected employee or a designated employee representative with an opportunity to observe any monitoring of employee exposure to inorganic arsenic which is conducted pursuant to these rules.

- (2) If observation of the monitoring of employee exposure to inorganic arsenic requires entry into an area where the use of respirators, protective clothing, or equipment is required, an employer shall provide the observer with, and assure the use of, such respirators, clothing, and equipment, and shall require the observer to comply with all other applicable safety and health procedures.
- (3) If the monitoring is not interfered with, observers shall be entitled to all of the following:
 - (a) To receive an explanation of the measurement procedures.

- (b) To observe all steps related to the monitoring of inorganic arsenic performed at the place of exposure.
- (c) To record the results obtained or to receive copies of the results when returned by the laboratory.

History: 1980 AACS.

R 325.51628 Rescinded.

History: 1980 AACS; 1993 AACS; 2000 AACS; 2014 AACS.