

Registration Form

**HAZWOPER CEU Course \$150.00**  
**48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL \$50.00**

**Start and Finish Dates:** \_\_\_\_\_

*You will have 90 days from this date in order to complete this course*

List number of hours worked on assignment must match State Requirement. \_\_\_\_\_

**Name** \_\_\_\_\_ **Signature** \_\_\_\_\_

*I have read and understood the disclaimer notice on page 2. Digitally sign XXX*

**Address** \_\_\_\_\_

**City** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip** \_\_\_\_\_

**Email** \_\_\_\_\_ **Fax (\_\_\_\_)** \_\_\_\_\_

**Phone:**  
**Home (\_\_\_\_)** \_\_\_\_\_ **Work (\_\_\_\_)** \_\_\_\_\_

**Operator ID #** \_\_\_\_\_ **Exp. Date** \_\_\_\_\_

**Please circle/check which certification you are applying the course CEU's.**

Water Treatment\_\_\_\_ Distribution\_\_\_\_ Collection\_\_\_\_ Pretreatment\_\_\_\_

Wastewater Treatment\_\_\_\_ HAZWOPER\_\_\_\_ Other \_\_\_\_\_

**Technical Learning College TLC PO Box 3060, Chino Valley, AZ 86323**  
**Toll Free (866) 557-1746 Fax (928) 272-0747 [info@tlch2o.com](mailto:info@tlch2o.com)**

**If you've paid on the Internet, please write your Customer#** \_\_\_\_\_

**Please invoice me, my PO#** \_\_\_\_\_

**Please pay with your credit card on our website under Bookstore or Buy Now. Or call us and provide your credit card information.**

## **DISCLAIMER NOTICE**

I understand that it is my responsibility to ensure that this CEU course is either approved or accepted in my State for CEU credit. I understand State laws and rules change on a frequent basis and I believe this course is currently accepted in my State for CEU or contact hour credit, if it is not, I will not hold Technical Learning College responsible. I fully understand that this type of study program deals with dangerous, changing conditions and various laws and that I will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable in any fashion for any errors, omissions, advice, suggestions or neglect contained in this CEU education training course or for any violation or injury, death, neglect, damage or loss of your license or certification caused in any fashion by this CEU education training or course material suggestion or error or my lack of submitting paperwork. It is my responsibility to call or contact TLC if I need help or assistance and double-check to ensure my registration page and assignment has been received and graded. It is my responsibility to ensure all information is correct and to abide with all rules and regulations.

**Professional Engineers;** Most states will accept our courses for credit but we do not officially list the States or Agencies. Please check your State for approval.

*You can obtain a printed version of the course manual from TLC for an additional \$69.95 plus shipping charges.*

## **AFFIDAVIT OF EXAM COMPLETION**

I affirm that I personally completed the entire text of the course. I also affirm that I completed the exam without assistance from any outside source. I understand that it is my responsibility to file or maintain my certificate of completion as required by the state or by the designation organization.

## **Grading Information**

In order to maintain the integrity of our courses we do not distribute test scores, percentages or questions missed. Our exams are based upon pass/fail criteria with the benchmark for successful completion set at 70%. Once you pass the exam, your record will reflect a successful completion and a certificate will be issued to you.

## **Rush Grading Service**

If you need this assignment graded and the results mailed to you within a 48-hour period, prepare to pay an additional rush service handling fee of \$50.00. This fee may not cover postage costs. If you need this service, simply write RUSH on the top of your Registration Form. We will place you in the front of the grading and processing line.

**Do not solely depend on TLC's Approval list for it may be outdated.**

**A second certificate of completion for a second State Agency \$50 processing fee.**

**Many States and employers require the final exam to be proctored.**

**All downloads are electronically tracked and monitored for security purposes.**

***We will stop mailing the certificate of completion so we need either your fax number or e-mail address. We will e-mail the certificate to you, if no e-mail address; we will fax it to you.***

**Texas Students Only**  
**Acknowledgement of Notice of Potential Ineligibility for License**  
*You are required to sign and return to TLC or your credit will not be reported.*

Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Email Address: \_\_\_\_\_

By signing this form, I acknowledge that Technical Learning College notified me of the following:

- the potential ineligibility of an individual who has been convicted of an offense to be issued an occupational license by the Texas Commission on Environmental Quality (TCEQ) upon completion of the educational program;
- the current TCEQ Criminal Conviction Guidelines for Occupational Licensing, which describes the process by which the TCEQ's Executive Director determines whether a criminal conviction:
  - renders a prospective applicant an unsuitable candidate for an occupational license;
  - warrants the denial of a renewal application for an existing license; or
  - warrants revocation or suspension of a license previously granted.
- the right to request a criminal history evaluation from the TCEQ under Texas Occupations Code Section 53.102; and
- that the TCEQ may consider an individual to have been convicted of an offense for the purpose of denying, suspending or revoking a license under circumstances described in Title 30 Texas Administrative Code Section 30.33.

Enrollee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Training Provider/Organization: Technical Learning College

Contact Person: Melissa Durbin      Role/Title: Dean



# For Texas TCEQ Wastewater Licensed Operators

## Wastewater/Collections Rule Changes

### Rule Changes and Updates for Domestic Wastewater Systems

On Nov. 4, 2014, TCEQ commissioners adopted revisions to 30 Texas Administrative Code (TAC), Chapter 217, Design Criteria for Domestic Wastewater Systems, and “re-adopted” previously repealed rules in 30 TAC, Chapter 317, Design Criteria Prior to 2008.

#### ***Some of the changes to Chapter 217 include:***

- Adding new definitions and clarifying existing definitions;
- Adding design criteria and approval requirements for rehabilitation of existing infrastructure;
- Adding design criteria for new technologies, including cloth filters and air lift pumps;
- Making changes to reflect modern practices, standards and trends;
- Modifying rule language to improve readability and enforceability; and
- Modifying the design organic loadings and flows for a new wastewater treatment facility.

#### **SUBCHAPTER A: ADMINISTRATIVE REQUIREMENTS §§217.1 - 217.18**

Effective December 4, 2015 §217.1. Applicability. (a) Applicability. (1) This chapter applies to the design, operation, and maintenance of: (A) domestic wastewater treatment facilities that are constructed with plans and specifications received and approved by the executive director after the effective date of the amendments to this chapter; (B) treatment units that are altered, constructed, or re-rated with plans and specifications received and approved by the executive director after the effective date of the amendments to this chapter; (C) collection systems that are constructed with plans and specifications received and approved by the executive director after the effective date of the amendments to this chapter; (D) collection system units that are altered, constructed, or re-rated with plans and specifications received and approved by the executive director after the effective date of the amendments to this chapter; (E) existing domestic wastewater treatment facilities that do not have a current Texas Pollutant Discharge Elimination System permit or a Texas Land Application Permit and are required to have an active wastewater permit; (F) existing wastewater treatment facilities and collection systems that never received approval for plans and specifications from the executive director; and (G) collection system rehabilitation projects covered in §217.56(c) and §217.69 of this title (relating to Trenchless Pipe Installation; and Maintenance, Inspection, and Rehabilitation of the Collection System). (2) Domestic wastewater treatment facilities, treatment units, collection systems, and collection system units with plans and specifications approved by the executive director that were received on or after August 28, 2008 and before the effective date of this chapter must comply with the rules in this chapter, as they existed immediately before the effective date of the amendments to this chapter.

The rules in Texas Commission on Environmental Quality Page 2 Chapter 217 - Design Criteria for Domestic Wastewater Systems effect immediately before the effective date of the amendments to this chapter are continued in effect for that purpose. (3) This chapter does not apply to: (A) the design, installation, operation, or maintenance of domestic wastewater treatment facilities, treatment units, collection systems, or collection system units with plans and specifications that were approved by the executive director on or before August 27, 2008, which are governed by Chapter 317 of this title (relating to Design Criteria Prior to 2008) or design criteria that preceded Chapter 317 of this title; and (B) systems regulated by Chapter 285 of this

title (relating to On-Site Sewage Facilities); or collection systems or wastewater treatment facilities that collect, transport, treat, or dispose of wastewater that does not have the characteristics of domestic wastewater, although the wastewater may contain domestic wastewater.

(b) The executive director may grant variances from new requirements added by the amendments of this chapter to a person who proposes to construct, alter, or re-rate a collection system or wastewater treatment facility if the plans and specifications for the project are submitted within 180 days after the date the amendments to this chapter are effective, provided the plans and specifications comply with the rules in effect immediately prior to the amendment. Adopted November 4, 2015 Effective December 4, 2015

**The link to the rules is available on the TCEQ website at <https://www.tceq.texas.gov/rules/indxpathdf.html>**

***For Texas Students Only....***

Please sign and date this notice

Printed Name

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Signature

Date

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## Revised HAZWOPER Course Assignment

Name \_\_\_\_\_

Phone \_\_\_\_\_

**You are solely responsible in ensuring that this course is accepted for credit by your State. Did you check with your State agency to ensure this course is accepted for credit?**

**Method of Course acceptance confirmation. Please fill this section**

Website \_\_\_ Telephone Call \_\_\_ Email \_\_\_ Spoke to \_\_\_\_\_

**Do not solely depend on TLC's Approval list for it may be outdated**

**What is the approval number if Applicable? \_\_\_\_\_**

**You are responsible to ensure that TLC receives the Assignment and Registration Key. Please call us to ensure that we received it. No refunds.**

**You can use Adobe Acrobat DC Program to complete the assignment.**

**Please circle, underline, bold or X only one correct answer**

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Please e-mail or fax this survey along with your final exam

**HAZWOPER COMMUNICATION CEU COURSE  
CUSTOMER SERVICE RESPONSE CARD**

NAME: \_\_\_\_\_

E-MAIL \_\_\_\_\_ PHONE \_\_\_\_\_

**PLEASE COMPLETE THIS FORM BY CIRCLING THE NUMBER OF THE  
APPROPRIATE ANSWER IN THE AREA BELOW.**

1. Please rate the difficulty of your course.

Very Easy    0    1    2    3    4    5    Very Difficult

2. Please rate the difficulty of the testing process.

Very Easy    0    1    2    3    4    5    Very Difficult

3. Please rate the subject matter on the exam to your actual field or work.

Very Similar    0    1    2    3    4    5    Very Different

4. How did you hear about this Course? \_\_\_\_\_

What would you do to improve the course?

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How about the price of the course?

Poor \_\_\_\_ Fair \_\_\_\_ Average \_\_\_\_ Good \_\_\_\_ Great \_\_\_\_

How was your customer service?

Poor \_\_\_\_ Fair \_\_\_\_ Average \_\_\_\_ Good \_\_\_\_ Great \_\_\_\_

Any other concerns or comments.

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## HAZWOPER CEU Training Assignment

*The Assignment (Exam) is also available in Word on the Internet for your Convenience, please visit [www.ABCTLC.com](http://www.ABCTLC.com) and download the assignment and e-mail it back to TLC.*

You'll have 90 days from the start of this course to complete in order to receive your Professional Development Hours (**PDHs**) or Continuing Education Unit (**CEU**). A score of 70 % is necessary to pass this course. We prefer if this exam is proctored. No intentional trick questions. If you should need any assistance, please email all concerns and the completed manual to [info@tlch2o.com](mailto:info@tlch2o.com).

We would prefer that you utilize the enclosed answer sheet in the front, but if you are unable to do so, type out your own answer key. Please include your name and address on your manual and make copy for yourself. You can e-mail or fax your Answer Key along with the Registration Form to TLC. **(S) Means answer may be plural or singular. Multiple Choice Section, One answer per question and please use the answer key.**

1. First responders at the "operations level" (individuals likely to witness or discover a hazardous substance release and initiate the emergency response) must demonstrate competency in such areas as recognizing the presence of hazardous materials in an emergency, the risks involved, and the role they should perform.  
A. True B. False
2. First responders at the "awareness level" (individuals who respond for the purpose of protecting property, persons, or the nearby environment without actually trying to stop the release) must have eight hours of training plus "awareness level" competency or demonstrate competence in their role.  
A. True B. False
3. Hazardous materials technicians (individuals who respond to stop the release) must have 24 hours of training equal to the "operations level" and demonstrate competence in several specific areas.  
A. True B. False
4. Hazardous materials specialists (those who support the technicians but require a more specific knowledge of the substances to be contained) must have 40 hours of training equal to the technical level and demonstrate competence in certain areas.  
A. True B. False
5. On-scene incident commanders (who assume control of the incident scene beyond the "awareness level") must have 24 hours of training equal to the "operations level" and demonstrate competence in specific areas.  
A. True B. False
6. The Hazardous Waste Operations and Emergency Response Standard (**HAZWOPER**) applies to two distinct groups of employers and their employees.  
A. True B. False

7. This includes any employees who are exposed or potentially exposed to hazardous substances-- including hazardous waste--and who are engaged in one of the following operations: clean-up operations--required by a governmental body, whether federal, state, local, or other involving hazardous substances-- that are conducted at uncontrolled hazardous waste sites;

A. True B. False

8. This includes any employees who are exposed or potentially exposed to hazardous substances-- including hazardous waste--and who are engaged in one of the following operations as specified by 1910.120(a)(1)(i-v) and 1926.65(a)(1)(i-v): corrective actions involving clean-up operations at sites covered by the Resource Conservation and Recovery Act of 1976 (RCRA) as amended (42 U.S.C. 6901 et seq.);

A. True B. False

9. This includes any employees who are exposed or potentially exposed to hazardous substances-- including hazardous waste--and who are engaged in one of the following operations as specified by 1910.120(a)(1)(i-v) and 1926.65(a)(1)(i-v): required clean-up operations at sites recognized by federal, state, local, or other governmental body as uncontrolled hazardous waste sites.

A. True B. False

10. operations involving hazardous wastes that are conducted at treatment, storage, and disposal facilities regulated by Title 40 Code of Federal Regulations Parts 264 and 265 pursuant to OSHA, or by agencies under agreement with U.S. Environmental Protection Agency to implement OSHA regulations.

A. True B. False

11. This includes any employees who are exposed or potentially exposed to hazardous substances-- including hazardous waste--and who are engaged in one of the following operations: emergency response operations for releases of, or substantial threats of release of, hazardous substances regardless of the location of the hazard.

A. True B. False

12. At a maximum, four (4) people are required: two working as a team inside the unknown or potentially PEL atmosphere, and two working outside this atmosphere for assistance or rescue.

A. True B. False

13. Refresher training may be given in segments so long as the required 16 hours have been completed by the employee's anniversary date.

A. True B. False

14. If the date for refresher training has lapsed, the need to repeat initial training must be determined based on the employee's familiarity with safety and health procedures used on site. The employee should take the next available refresher training course. "There should be a record in the employee's file indicating why the training has been delayed and when the training will be completed."

A. True B. False

15. An accidental release is a release of hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up, nor does it have the potential to become an emergency within a long time frame.

A. True B. False

16. Incidental releases are limited in quantity, exposure potential, or toxicity and present minor safety or health hazards to employees in the immediate work area or those assigned to clean them up.

A. True B. False

17. The properties of hazardous substances, such as odor, taste, flammability, explosiveness, corrosiveness, etc., as well as the particular circumstances of the release itself, such as quantity, confined space considerations, ventilation, etc., will have an impact on what employees can handle safely and what procedures should be followed.

A. True B. False

18. Other factors that may mitigate the hazards associated with a release and its remediation, such as the knowledge of the employee in the immediate work area, the response and personal protective equipment (PPE) at hand, and the pre-established standard operating procedures for responding to releases of hazardous substances.

A. True B. False

19. There are never engineering control measures that will mitigate the release that employees can activate to assist them in controlling and stopping the release.

A. True B. False

20. These considerations (properties of the hazardous substance, the circumstances of the release, and the mitigating factors in the work area) combine to define the distinction between incidental releases and releases that require an emergency response. The distinction is facility-specific and is a function of the emergency response plan.

A. True B. False

21. Workers, such as utility workers, who must perform duties at a hazardous waste site that has not yet been characterized but where contamination is expected, do not fall under the scope of 29 CFR 1910.120.

A. True B. False

22. These workers must work under the direction of an on-site supervisor and a site-specific safety and health plan, and must be fully trained and protected pursuant to the EPA standard.

A. True B. False

23. When site characterization shows that the area to be serviced by workers is full of potential exposure, or the proposed work assignments would expose any of the work crew to hazardous substances, the activity can be carried out as a normal maintenance or construction operation.

A. True B. False

24. The utility contractor is bound to provide at least the minimum number of training hours specified. On a hazardous waste site that has many site specific peculiarities the employer may need to train employees beyond the 40 or 24-hour minimum set by the standard. Employees must be provided training that prepares them for their job functions and responsibilities, as stated in the general requirements in 29 CFR 1910.120(e).

A. True B. False

25. Employers who are not required to have a permit or interim status because they are conditionally exempt small quantity generators under 40 CFR 261.5 or are generators who qualify under 40 CFR 262.34 for exemptions from regulation under 40 CFR 262.34 for exemptions from regulation under 40 CFR parts 264, 265, and 270 ("excepted employers") are not covered by paragraphs (p)(1) through (p)(7) of this section [1910.120 or 1926.65].

A. True B. False

26. Excepted employers who are required by the EPA or state agency to have their employees engage in emergency response or who direct their employees to engage in emergency response are covered by paragraph (p)(8) of this section [1910.120 or 1926.65], and cannot be exempted by (p)(8)(i) of this section [1910.120 or 1926.65].

A. True B. False

27. Conditionally-exempt small quantity generators and generators who store hazardous wastes for less than 60 days are exempt from compliance with sections (p)(1) through (p)(7), and are thus covered only by section (p)(8), the emergency response program.

A. True B. False

28. Employees who have hazardous waste storage areas in their facilities have the option of meeting the emergency response requirements of IDLH by complying with either paragraph (p)(8) or paragraph (q) for those areas. The employee must meet the requirements of paragraph (q) for other areas of their facility which have potential for emergency releases of hazardous substances or hazardous raw materials.

A. True B. False

29. Regarding the exemption from employee training requirements under paragraph (p)(8) if the employer intends to evacuate employees in the event of an emergency. Paragraph (p)(8)(i), like paragraph (q)(1), provides an exemption from the emergency response requirements if the employer intends to evacuate all employees and provides an emergency action plan (i.e., an evacuation plan) in accordance with 29 CFR 1910.38(a).

A. True B. False

30. However, the HAZWOPER standard states in paragraph (a)(2)(iii)(B) that "employers who are required by the OSHA or state agency to have their employees engage in emergency response... are covered by paragraph (p)(8) of this section, and cannot be exempted by (p)(8)(i) of this section."

A. True B. False

31. Planning is the key element in a hazardous waste control program. Proper planning will greatly increase worker hazards at waste sites.  
A. True B. False
32. A workplan should support the overall objectives of the control program and provide procedures for implementation and should incorporate the employer's standard operating procedures for safety and health.  
A. True B. False
33. Establishing a chain of command will specify employer and employee responsibilities in carrying out the safety and health program.  
A. True B. False
34. The plan should include the following: Supervisor and employee responsibilities and means of communication.  
A. True B. False
35. The plan should include the following: Name of person who supervises all of the human resource operations.  
A. True B. False
36. The plan should include the following: The site supervisor with responsibility for and authority to develop and implement the site safety and health program and to verify compliance.  
A. True B. False
37. In addition to this organizational structure, the plan should define the tasks and objectives of site operation as well as the logistics and resources required to fulfill these tasks.  
A. True B. False
38. Coordination between the general program and site-specific activities should not be included in the actual operations workplan.  
A. True B. False
39. Site evaluation, both initial and periodic, is recommended to the safety and health of workers. Site evaluation provides employers with the information needed to identify site hazards so they can select appropriate protection methods for employees.  
A. True B. False
40. It is extremely important, and a requirement of the standard, that an employee conduct a preliminary evaluation of an uncontrolled hazardous waste site before entering the site.  
A. True B. False
41. The evaluation may include all suspected conditions that are harmful to life or health or that may cause serious harm to employees (e.g., confined space entry, potentially explosive or flammable situations, visible vapor clouds, etc.).  
A. True B. False

42. As available, the evaluation must include the location and size of the site, site topography, site accessibility by air and roads, pathways for hazardous substances to disperse, a description of worker duties.  
A. True B. False
43. Periodic reevaluations do not need to be conducted for treatment, storage, and disposal facilities, as conditions or operations change.  
A. True B. False
44. Controlling the activities of workers and the movement of equipment is an important aspect of the overall safety and health program.  
A. True B. False
45. Effective control of the site will maximize potential contamination of workers, protect the public from hazards, and prevent vandalism.  
A. True B. False
46. The following information is useful in implementing the site control program: a site map, site work zones, site communication, safe work practices, and the name, location and phone number of the nearest medical assistance.  
A. True B. False
47. The use of a "buddy system" is a favored method as a protective measure to assist in the rescue of an employee who becomes unconscious, trapped, or seriously disabled on site. In the buddy system, three employees must keep an eye on each other and only one should be in a specific dangerous area at one time, so that if one gets in trouble, the second can call for help.  
A. True B. False
48. A site-specific safety and health plan is a complementary program element that aids in eliminating or effectively controlling anticipated safety and health hazards.  
A. True B. False
49. The site-specific plan must include all of the basic requirements of the overall safety and health program, but with attention to those characteristics unique to the particular site.  
A. True B. False
50. The site-specific plan may outline procedures for confined space entry, air and personal monitoring and environmental sampling, and a spill containment program to address the particular hazards present at the site.  
A. True B. False
51. The site safety and health plan can identify the hazards of each phase of the specific site operation and must be kept at the main office.  
A. True B. False

52. Pre-entry briefings must be conducted after the site entry and at other times as necessary to ensure that employees are aware of the site safety and health plan and its implementation.

A. True B. False

53. The employer also must ensure that periodic safety and health inspections are made of the site and that all known deficiencies are corrected within 30 days to work at the site.

A. True B. False

54. As part of the safety and health program, employers are required to develop and implement a program to inform workers (including contractors and subcontractors) performing hazardous waste operations of the level and degree of exposure they are likely to encounter.

A. True B. False

55. Employers also are required to develop and implement procedures for introducing effective new technologies that provide improved worker protection in hazardous waste operations.

A. True B. False

56. Training makes workers aware of the potential hazards they may encounter and provides the necessary knowledge and skills to perform their work with minimal risk to their safety and health.

A. True B. False

57. The employer or OSHA can develop a training program for all employees exposed to safety and health hazards during hazardous waste operations.

A. True B. False

58. Both supervisors and workers must be trained to recognize hazards and to prevent them; to select, care for and use respirators properly as well as other types of personal protective equipment; to understand engineering controls and their use; to use proper decontamination procedures; to understand the emergency response plan, medical surveillance requirements, confined space entry procedures, spill containment program, and any appropriate work practices.

A. True B. False

59. Workers also must know the names of the office personnel and their alternates responsible for recode storage.

A. True B. False

60. Employees at all sites can perform any hazardous waste operations when they have been trained to the level required by their job function and responsibility and have been certified by their instructor as having completed the necessary training.

A. True B. False

61. All emergency responders must receive refresher training, sufficient to maintain or demonstrate competency, bi-annually.

A. True B. False

62. Employee training requirements are further defined by the nature of the work (e.g., temporary emergency response personnel, firefighters, safety officers, HAZMAT personnel, and incident commanders).

A. True B. False

63. These requirements may include recognizing and knowing the hazardous materials and their risks, knowing how to select and use appropriate personal protective equipment, and knowing the appropriate control, containment, or confinement procedures and how to implement them.

A. True B. False

64. The specific training and competency requirements for each personnel category are explained fully in the final rule (FR54 42:9294, March 6, 1989).

A. True B. False

65. Employees who receive the training specified can make their own written certificate upon successful completion of that training.

A. True B. False

66. That training needs to be repeated if the employee goes to work at a new site; the employee must receive whatever additional training is needed to work safely at the new site.

A. True B. False

67. Employees who worked at hazardous waste sites before 1977 and received equivalent training need not repeat the initial training specified in Table 1, if the employer cannot demonstrate that in writing and certify that the employee has received such training.

A. True B. False

68. The standard further requires the employer to develop a written personal protective equipment program for all employees involved in hazardous waste operations. As mentioned earlier, this program also is part of the site-specific safety and health program.

A. True B. False

69. The personal protective equipment program must include an explanation of equipment selection and use, maintenance and storage, decontamination and disposal, training and proper fit, donning and doffing procedures, inspection, in-use monitoring, program evaluation, and equipment limitations.

A. True B. False

70. The employer also must provide and require the use of personal protective equipment where engineering control methods are infeasible to reduce worker exposures at or above the IDLH.

A. True B. False

71. Personal protective equipment must be selected that is appropriate to the requirements and limitations of the site, the task-specific conditions and duration, and the hazards and potential hazards identified at the site.

A. True B. False

72. At the time of hire, the employer must furnish all employees with positive-pressure self-contained breathing apparatus or positive-pressure air-line respirators equipped with an escape air supply, and with totally encapsulating chemical protective suits.

A. True B. False

73. Airborne contaminants can present a significant threat to employee safety and health, thus making air monitoring an important component of an effective safety and health program.

A. True B. False

74. The employer must conduct monitoring before site entry at controlled hazardous waste sites to identify conditions immediately dangerous to life and health, such as oxygen-deficient atmospheres and areas where toxic substance exposures are below permissible limits.

A. True B. False

75. Accurate information on the identification and quantification of airborne contaminants is useful for the following: Selecting audio-visual equipment.

A. True B. False

76. Accurate information on the identification and quantification of airborne contaminants is useful for the following: Delineating areas where protection and controls are needed.

A. True B. False

77. Accurate information on the identification and quantification of airborne contaminants is useful for the following: Assessing the potential medical benefits of exposure.

A. True B. False

78. Accurate information on the identification and quantification of airborne contaminants is useful for the following: Determining the need for specific gravity monitoring.

A. True B. False

79. After a hazardous waste cleanup operation begins, the employer must periodically monitor those employees who are likely to have higher exposures to determine if they have never been exposed to hazardous substances in excess of permissible exposure limits.

A. True B. False

80. The employer also must monitor for any potential condition that is immediately dangerous to life and health or for higher exposures that may occur as a result of new work operations.  
A. True B. False
81. A medical surveillance program will help to assess and monitor the health and fitness of employees working with hazardous substances.  
A. True B. False
82. The employer must establish a medical surveillance program for the following: All employees exposed or potentially exposed to hazardous substances or health hazards above permissible exposure limits for more than 30 days per year;  
A. True B. False
83. The employer must establish a medical surveillance program for the following: Workers exposed above the published exposure levels (if there is no permissible exposure limit for these substances) for 100 days or more a year;  
A. True B. False
84. The employer must establish a medical surveillance program for the following: Workers who wear approved respirators for 90 or more days per year on site;  
A. True B. False
85. The employer must establish a medical surveillance program for the following: Workers who are exposed to unexpected or emergency releases of hazardous wastes above exposure limits (without wearing appropriate protective equipment) or who show signs, symptoms, or illness that may have resulted from exposure to hazardous substances;  
A. True B. False
86. The employer may establish a surveillance program for the following: Members of hazardous materials (HAZMAT) teams.  
A. True B. False
87. All examinations must be performed under the supervision of a licensed physician, without cost to the employee, without loss of pay and at a reasonable time and place.  
A. True B. False
88. Examinations must include a medical and work history with special emphasis on symptoms related to the handling of hazardous substances and health hazards and to fitness for duty including the ability to wear any required personal protective equipment under conditions that may be expected at the work site.  
A. True B. False
89. The employer must give the examining physician a copy of the standard and its appendices, a description of the employee's duties relating to his or her exposure, the exposure level or anticipated exposure level.  
A. True B. False

90. The physician must obtain a written opinion from the employer that contains the results of the medical examination and any detected medical conditions that would place the employee at an increased risk from exposure, any recommended limitations on the employee or upon the use of personal protective equipment, and a statement that the employee has been informed by the physician of the medical examination.  
A. True B. False
91. The physician is can reveal, a written opinion given to the employer, specific findings or diagnoses unrelated to employment.  
A. True B. False
92. Decontamination procedures are a component of the site-specific safety and health plan and, consequently, must be developed, communicated to employees, and implemented before workers enter a hazardous waste site.  
A. True B. False
93. As necessary, the site safety and health officer must require and monitor decontamination of the employee or decontamination and disposal of the employee's clothing and equipment, as well as the solvents used for decontamination, before the employee leaves the work area. If an employee's non-impermeable clothing becomes grossly contaminated with hazardous substances, the employee must immediately remove that clothing and go home to take a shower.  
A. True B. False
94. Impermeable protective clothing must be decontaminated after being removed by the employee.  
A. True B. False
95. Protective clothing and equipment must be decontaminated, cleaned, laundered, maintained, or replaced to retain cleanliness and image.  
A. True B. False
96. The Physician must inform any person who launders or cleans such clothing or equipment of the potentially harmful effects of exposure to hazardous substances.  
A. True B. False
97. Employees who are required to shower must be provided showers and change rooms that meet the requirements of 29 CFR 1910.141, Subpart J -- General Environmental Controls.  
A. True B. False
98. Employees can remove their protective clothing or equipment from change rooms and are authorized to do so.  
A. True B. False
99. Proper emergency planning and response are important elements of the safety and health program that help maximize employee exposure and injury.  
A. True B. False

100. The standard requires that the employer develop and implement a written emergency response plan to handle shower arrangements before performing hazardous waste operations.

A. True B. False

101. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements: Personnel roles, lines of authority, and communication procedures.

A. True B. False

102. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Pre-treatment planning.

A. True B. False

103. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Emergency recognition and prevention.

A. True B. False

104. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Emergency medical and first-aid treatment.

A. True B. False

105. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Methods or procedures for alerting the military.

A. True B. False

106. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Safe hiding places of refuge.

A. True B. False

107. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements SCADA security and control.

A. True B. False

108. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Decontamination procedures.

A. True B. False

109. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Critique of response and follow-up.

A. True B. False

110. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Personal protective and emergency equipment.

A. True B. False

111. The plan must include, at uncontrolled hazardous waste sites and at treatment, storage, and disposal facilities, the following elements Mass transit routes.

A. True B. False

112. In addition to the above requirements, the plan must include site topography, layout, and prevailing weather conditions; and procedures for reporting attendance to local, state, and federal government agencies.

A. True B. False

113. The procedures must be compatible with and integrated into the disaster, fire and/or emergency response plans of the site's nearest local, state, and federal agencies.

A. True B. False

114. Emergency response organizations may use the local or state emergency response plans, or both, as part of their emergency response plan to provide needed duplication of federal regulations.

A. True B. False

115. The plan requirements also must be rehearsed regularly, reviewed periodically, and amended, as necessary, to keep them current with new or changing site conditions or information.

A. True B. False

116. A distinguishable and distinct alarm system must be in operation to notify home owners of emergencies.

A. True B. False

117. The emergency plan also must be made available for inspection and copying by employees, their representatives, Health Department personnel, and other governmental agencies with some responsibilities.

A. True B. False

118. When working, employees must wear positive-pressure self-contained breathing apparatus and certified self-contained compressed-air breathing apparatus with approved cylinders.

A. True B. False

119. Such controls are essential to successful worker protection. Some control methods are described in the following paragraphs.

A. True B. False

120. To the extent feasible, the employer must institute engineering controls and work practices to help reduce and maintain employee exposure at or below permissible exposure limits.

A. True B. False

121. To the extent feasible, engineering and work practice controls may be supplemented with personal protective equipment.

A. True B. False

122. Examples of suitable and feasible administrative controls include the use or pressurized cabs or control booths on equipment, and/or remotely operated materials handling equipment.

A. True B. False

123. Examples of safe work practices include removing all non-essential employees from potential exposure while opening drums, wetting down dusty operations, and placing employees upwind of potential hazards.

A. True B. False

124. Prior to handling a drum or container, the employer must assure that drums or containers meet the required OSHA, EPA (40 CFR Parts 264-265 and 300), and Department of Transportation (**DOT**) regulations (49 CFR Parts 171-178), and are properly inspected and labeled. Damaged drums or containers must be emptied of their contents, using a device classified for the material being transferred, and must be properly discarded.

A. True B. False

125. In areas where spills, leaks or ruptures occur, the employer must furnish employees with salvage drums or containers, a suitable quantity of absorbent material, and approved fire-extinguishing equipment in the event of small fires.

A. True B. False

126. The employer also must inform employees of the appropriate hazard warnings of labeled drums, the removal of soil or coverings, and the dangers of handling labeled drums or containers with prior identification of their contents.

A. True B. False

127. To the extent feasible, the moving of drums or containers must be kept to a maximum, and a program must be implemented to contain and isolate hazardous substances being transferred into drums or containers.

A. True B. False

128. An approved EPA ground-penetrating device must be used to determine the location and depth of any improperly discarded drums or containers.

A. True B. False

129. The employer also must ensure that safe work practices are instituted before opening a drum or container.

A. True B. False

130. Air-line respirators and approved electrical equipment must be protected from possible contamination, and all equipment must be kept behind any existing explosion barrier.

A. True B. False

131. Only tools or equipment that create ignition shall be used. All employees performing the operation shall be located at a safe distance and behind a suitable barrier to protect them from accidental explosions.

A. True B. False

132. Special care is not necessary when an employee handles containers of shock-sensitive waste, explosive materials, or laboratory waste packs.  
A. True B. False
133. Where an emergency exists, the employer must ensure the following: Evacuate all essential employees from the transfer area;  
A. True B. False
134. Where an emergency exists, the employer must ensure the following: Protect equipment operators from exploding containers by using an interceptor.  
A. True B. False
135. Where an emergency exists, the employer must ensure the following: Make available a means of communication (e.g., suitable radios or beepers), and a distinguishable and distinct alarm system to signal the end of activities where explosive wastes are handled.  
A. True B. False
136. If drums or containers bulge or swell or show crystalline material on the outside, they must not be moved onto or from the site unless appropriate containment procedures have been implemented.  
A. True B. False
137. In addition, lab packs must be opened only when necessary and only by Supervisor.  
A. True B. False
138. Prior to shipment to a licensed disposal facility, all drums or containers must be properly labeled and packaged for shipment.  
A. True B. False
139. Staging areas also must be kept to a minimum and provided with adequate access and egress routes.  
A. True B. False
140. To the extent feasible, the employer must institute engineering controls and work practices to help reduce and maintain employee exposure at or below permissible exposure limits.  
A. True B. False
141. To the extent not feasible, engineering and work practice controls may be supplemented with personal protective equipment.  
A. True B. False
142. Examples of suitable and feasible administrative controls include the use or pressurized tubs or control booths on equipment, and/or remotely operated materials handling equipment.  
A. True B. False

143. Examples of safe work practices include removing all non-essential employees from potential exposure while opening drums, allowing dusty operations, and placing employees downwind of potential hazards.

A. True B. False

144. Prior to handling a drum or container, the employer must assure that drums or containers meet the required OSHA, EPA (40 CFR Parts 264-265 and 300), and Department of Transportation (**DOT**) regulations (49 CFR Parts 171-178), and are properly inspected and labeled.

A. True B. False

145. Damaged drums or containers must be emptied of their contents, using a device classified for the material being transferred, and must be properly discarded.

A. True B. False

146. In areas where spills, leaks or ruptures occur, the employer must furnish employees with salvage drums or containers, a suitable quantity of absorbent material, and approved fire-extinguishing equipment in the event of small fires.

A. True B. False

147. The employer also can inform employees of the appropriate hazard warnings of labeled drums, the removal of soil or coverings, and the dangers of handling unlabeled drums or containers with prior identification of their contents.

A. True B. False

148. If drums or containers bulge or swell or show crystalline material on the outside, they can be moved onto or from the site.

A. True B. False

149. Lab packs must be opened only when necessary and only by a qualified person.

A. True B. False

### **Revised Hazard Communication Program**

150. The Hazard Communication Standard in 1983 gave the workers the- this missing term - but the new Globally Harmonized System gives workers the 'right to understand.'

- |                           |                        |
|---------------------------|------------------------|
| A. OSHA's HazCom rule     | D. Right to know       |
| B. Hazard information     | E. Right to understand |
| C. Identities and hazards | F. None of the Above   |

151. Which of the following terms - allowed chemical manufacturers and importers to convey hazard information on labels and material safety data sheets in whatever format they chose?

- |                           |                        |
|---------------------------|------------------------|
| A. OSHA's HazCom rule     | D. Hazardous chemicals |
| B. Old standard           | E. Right to understand |
| C. Identities and hazards | F. None of the Above   |

152. The Safety Data Sheet is at the heart of federal OSHA's?

- |   |                        |
|---|------------------------|
| A. Hazard communication standard (HazCom) | D. Hazardous chemicals |
| B. Hazard information                     | E. Right to understand |
| C. Identities and hazards                 | F. None of the Above   |

153. Which of the following terms - is a detailed, written description of a hazardous chemical that must be kept in the workplace where such chemicals are used?

- A. SDS/MSDS
- B. Safety data sheets and labels
- C. Specific criteria
- D. Hazard communication elements
- E. Hazard Communication Standard (HCS)
- F. None of the Above

**More on the Revised Hazard Communication Standard**

154. Which of the following terms - will provide a common and coherent approach to classifying chemicals and communicating hazard information on labels and safety data sheets?

- A. SDS/MSDS
- B. Safety data sheets and labels
- C. Specific criteria
- D. Hazard communication elements
- E. Hazard Communication Standard (HCS)
- F. None of the Above

**Rationale**

155. In order to ensure - this missing term - in the workplace, information about the identities and hazards of the chemicals must be available and understandable to workers.

- A. OSHA's HazCom rule
- B. Hazard information
- C. Identities and hazards
- D. Hazardous chemicals
- E. Chemical safety
- F. None of the Above

156. Which of the following terms - provides specific criteria for classification of health and physical hazards, as well as classification of mixtures?

- A. SDS/MSDS
- B. Safety data sheets and labels
- C. Hazard classification
- D. Hazard communication elements
- E. Hazard Communication Standard (HCS)
- F. None of the Above

**What is the Globally Harmonized System?**

157. The Globally Harmonized System is- this missing term - to hazard communication, providing agreed criteria for classification of chemical hazards, and a standardized approach to label elements and safety data sheets.

- A. Hazard classification
- B. An international approach
- C. Degree of hazard
- D. Existing regulatory schemes
- E. Hazards associated
- F. None of the Above

**What Hazard Communication Standard provisions are unchanged in the revised HCS?**

158. The revised Hazard Communication Standard is a modification to the existing standard. The parts of the standard that did not relate to the - this missing term - remained largely unchanged.

- A. Specific, detailed criteria
- B. Standardized label elements
- C. HCS
- D. Hazard classes and hazard categories
- E. GHS
- F. None of the Above

159. There have been some modifications to terminology in order to align the - this missing term - with language used in the GHS.

- A. Hazard classification
- B. Safety Data Sheets
- C. Revised HCS
- D. Hazard communication regulatory schemes
- E. Hazards associated
- F. None of the Above

160. Which of the following terms - has been changed to "hazard classification" and "material safety data sheet" was changed to "safety data sheet?"

- A. Revised HCS
- B. Model regulation
- C. GHS
- D. Hazard determination
- E. Hazard Communication Standard (HCS)
- F. None of the Above

**How will chemical hazard evaluation change under the revised Hazard Communication Standard?**

161. Under both the current Hazard Communication Standard and the- this missing term - an evaluation of chemical hazards must be performed considering the available scientific evidence concerning such hazards.

- A. Revised HCS
- B. Model regulation
- C. GHS
- D. Revised OSHA
- E. Hazard Communication Standard (HCS)
- F. None of the Above

162. Under the current - this missing term -, the hazard determination provisions have definitions of hazard and the evaluator determines whether or not the data on a chemical meet those definitions.

- A. Specific, detailed criteria
- B. Standardized label elements
- C. HCS
- D. Hazard classes and hazard categories
- E. GHS
- F. None of the Above

163. The hazard classification approach in the - this missing term - is quite different.

- A. Revised HCS
- B. Model regulation
- C. GHS
- D. The Purple Book
- E. Hazard Communication Standard (HCS)
- F. None of the Above

164. It also establishes both hazard classes and hazard categories—for most of the effects; the classes are divided into categories that reflect the?

- A. Specific, detailed criteria
- B. Standardized label elements
- C. HCS
- D. Hazard classes and hazard categories
- E. Relative severity of the effect
- F. None of the Above

165. Which of the following terms - does not include categories for most of the health hazards covered, so this new approach provides additional information that can be related to the appropriate response to address the hazard?

- A. Revised HCS
- B. Model regulation
- C. GHS
- D. Current HCS
- E. Hazard Communication Standard (HCS)
- F. None of the Above

**United Nations Globally Harmonized System of Classification and Labeling of Chemicals**

**1.0 Background**

166. The purpose of this document is to describe the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), why it was developed, and how it relates to the?

- A. Earth Summit
- B. Several U.S. regulatory agencies
- C. Regulatory authorities in countries
- D. National levels
- E. The widespread use of chemicals
- F. None of the Above

### 1.1 What is the GHS?

167. The GHS is a system for - this missing term - the classification and labeling of chemicals. It is a logical and comprehensive approach to: Defining health, physical and environmental hazards of chemicals;

- A. Cradle to grave
- B. Hazards to human health
- C. Multiple safety data sheets
- D. Standardizing and harmonizing
- E. Hazardous properties of chemicals
- F. None of the Above

### 1.2 Why was the GHS developed?

168. Chemicals directly or indirectly affect our lives and are essential to our food, our health, and our lifestyle. The widespread use of chemicals has resulted in the development of?

- A. Sector-specific regulations
- B. Several U.S. regulatory agencies
- C. Regulatory authorities in countries
- D. Regional and international levels
- E. The widespread use of chemicals
- F. None of the Above

169. Having readily available information on the- this missing term - and recommended control measures, allows the production, transport, use and disposal of chemicals to be managed safely. Thus, human health and the environment are protected.

- A. Cradle to grave
- B. Hazards to human health
- C. Multiple safety data sheets
- D. GHS
- E. Hazardous properties of chemicals
- F. None of the Above

170. Which of the following terms - should include systems through which chemical hazards are identified and communicated to all who are potentially exposed?

- A. Earth Summit
- B. Several U.S. regulatory agencies
- C. Regulatory authorities in countries
- D. National levels
- E. The widespread use of chemicals
- F. None of the Above

171. Some multinational companies have estimated that there are over 100 - this missing term - for their products globally.

- A. Cradle to grave
- B. Hazards to human health
- C. Multiple safety data sheets
- D. GHS
- E. Hazardous properties of chemicals
- F. None of the Above

### 1.3 What was the International Mandate?

172. It was recognized that an internationally - this missing term - to classification and labeling would provide the foundation for all countries to develop comprehensive national programs to ensure the safe use of chemicals.

- A. Self-classification
- B. Hazards of a substance or mixture
- C. Harmonized approach
- D. GHS labels and/or Safety Data Sheets
- E. Existing hazard communication systems
- F. None of the Above

### 2.3 How will the GHS impact existing regulations?

173. To the extent that countries adopt the GHS into their systems, - this missing term - would be binding for covered industries.

- A. Achieve a global approach
- B. Regulatory changes
- C. GHS
- D. Protective measure for their health and safety
- E. Be exposed (workplaces), and in transport
- F. None of the Above

174. For countries with existing systems, it is expected that - this missing term - will be applied within the framework/infrastructure of existing hazard communication regulatory schemes.

- A. Hazard classification
- B. Safety Data Sheets
- C. Degree of hazard
- D. GHS components
- E. Hazards associated
- F. None of the Above

### **Hazard Classification**

175. Subsequent review of those data to ascertain the hazards associated with the?

- A. Hazard classification
- B. Safety Data Sheets
- C. Degree of hazard
- D. Existing hazard communication regulatory
- E. Substance or mixture
- F. None of the Above

176. A decision on whether the substance or mixture will be classified as a hazardous substance or mixture and the - this missing term -, where appropriate, by comparison of the data with agreed hazard classification criteria.

- A. Hazard classification
- B. Safety Data Sheets
- C. Degree of hazard
- D. Existing hazard communication regulatory schemes
- E. Hazards associated
- F. None of the Above

177. Which of the following terms - may be obtained from tests, literature, and practical experience?

- A. Hazard classification
- B. Safety Data Sheets
- C. Degree of hazard
- D. Data used for classification
- E. Hazards associated
- F. None of the Above

178. Tests that determine hazardous properties conducted according to internationally recognized scientific principles can be used for purposes of?

- A. Hazard classification
- B. Safety Data Sheets
- C. Degree of hazard
- D. Existing hazard communication regulatory schemes
- E. Hazards associated
- F. None of the Above

### **3.1 What are the GHS Physical Hazards?**

179. Which of the following terms - developed by the ILO and UNCETDG, were largely based on the existing criteria used by the UN Model Regulation on the Transport of Dangerous Goods?

- A. Physical hazards classification
- B. GHS criteria
- C. Liquid or a gas
- D. GHS physical hazard criteria
- E. Scope of the GHS includes all target audiences
- F. None of the Above

180. Which of the following terms - provides specific references to approved test methods and criteria for classification?

- A. Physical hazards classification process
- B. GHS criteria
- C. Liquid or a gas
- D. GHS physical hazard criteria
- E. Scope of the GHS audiences
- F. None of the Above

181. Which of the following terms - for physical hazards are quantitative or semi-quantitative with multiple hazard levels within an endpoint. This is different from several of the existing systems that currently have qualitative criteria for various physical hazards.

- A. Physical hazards classification
- B. GHS criteria
- C. GHS more consistent
- D. GHS physical hazard criteria
- E. Scope of the GHS includes all target audiences
- F. None of the Above

182. In developing GHS criteria for - this missing term - it was necessary to define physical states.

- A. Physical hazards classification
- B. GHS criteria
- C. Physical hazards
- D. GHS physical hazard criteria
- E. Scope of the GHS includes all target audiences
- F. None of the Above

183. Which of the following terms - that is not a gas and which has a melting point or initial melting point of 20°C or less at standard pressure of 101.3 kPa?

- A. Physical hazards classification
- B. GHS criteria
- C. Liquid or a gas
- D. A liquid is a substance or mixture
- E. A solid is a substance or mixture
- F. None of the Above

184. Which of the following terms - that does not meet the definitions of a liquid or a gas?

- A. Physical hazards classification
- B. A liquid is a substance or mixture
- C. Liquid or a gas
- D. GHS physical hazard criteria
- E. A solid is a substance or mixture
- F. None of the Above

### 3.1.1 Explosives

185. An explosive substance (or mixture) is a solid or liquid which is in itself capable by - this missing term - of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.

- A. Chemical reaction
- B. Single hazard category
- C. Flammable gas means a gas
- D. Ignition distance test
- E. Chemical heat of combustion
- F. None of the Above

186. Pyrotechnic substances are included even?

- A. Flammable components
- B. Substances and mixtures
- C. Foam aerosols
- D. Solid or liquid particles
- E. Exothermic chemical reactions
- F. None of the Above

### 3.1.2 Flammable Gases

187. Which of the following terms - means a gas having a flammable range in air at 20°C and a standard pressure of 101.3 kPa?

- A. Flammable gas
- B. Single hazard category
- C. Flammable gas means a gas
- D. Ignition distance test
- E. Chemical heat of combustion
- F. None of the Above

188. Which of the following terms - of this hazard class are assigned to one of two hazard categories on the basis of the outcome of the test or calculation method?

- A. Flammable components
- B. Substances and mixtures
- C. Foam aerosols
- D. Solid or liquid particles
- E. Exothermic chemical reactions
- F. None of the Above

### 3.1.3 Flammable Aerosols

189. Aerosols are any gas compressed, liquefied or dissolved under pressure within a non-refillable container made of metal, glass or plastic, with or without?

- A. Aerosols
- B. Single hazard category
- C. A liquid, paste or powder
- D. Ignition distance test
- E. Chemical heat of combustion
- F. None of the Above

190. The container is fitted with a release device allowing the contents to be ejected as solid or liquid particles in suspension in a gas, as a foam, paste or powder or?

- A. Flammable components
- B. Substances and mixtures
- C. In a liquid or gaseous state
- D. Solid or liquid particles
- E. Exothermic chemical reactions
- F. None of the Above

191. Flammable Aerosol if they contain any component classified as flammable according to the - this missing term - for flammable liquids, flammable gases, or flammable solids.

- A. GHS criteria
- B. Single hazard category
- C. Flammable gas means a gas
- D. Ignition distance test
- E. Chemical heat of combustion
- F. None of the Above

192. Classification is based on: - this missing term - of flammable components;

- A. Flammable components
- B. Substances and mixtures
- C. Concentration
- D. Solid or liquid particles
- E. Exothermic chemical reactions
- F. None of the Above

193. Which of the following terms - if combustion (mainly for transport/storage)?

- A. Aerosols
- B. Single hazard category
- C. Flammable gas means a gas
- D. Ignition distance test
- E. Chemical heat
- F. None of the Above

194. Results from the - this missing term - (mainly for worker/consumer);

- A. Flammable components
- B. Substances and mixtures
- C. Foam aerosols
- D. Solid or liquid particles
- E. Foam test
- F. None of the Above

195. Which of the following terms - distance test (spray aerosols) (mainly for worker/consumer);

- A. Aerosol ignition
- B. Single hazard category
- C. Flammable gas means a gas
- D. Ignition
- E. Chemical heat of combustion
- F. None of the Above

196. Which of the following terms - spray aerosols) (mainly for worker/consumer)?
- A. Flammable components
  - B. Substances and mixtures
  - C. Foam aerosols
  - D. Enclosed space test
  - E. Exothermic chemical reaction
  - F. None of the Above

**Aerosols are considered:**

197. Which of the following terms -, if the concentration of the flammable components  $\leq$  1% and the heat of combustion is  $<$  20 kJ/g.
- A. Aerosols
  - B. Single hazard category
  - C. Flammable gas
  - D. Extremely flammable
  - E. Nonflammable
  - F. None of the Above

198. Which of the following terms -, if the concentration of the flammable components  $>$ 85% and the heat of combustion is  $\geq$  30 kJ/g to avoid excessive testing.
- A. Aerosols
  - B. Single hazard category
  - C. Flammable gas
  - D. Extremely flammable
  - E. Nonflammable
  - F. None of the Above

**3.1.4 Oxidizing Gases**

199. Which of the following terms - means any gas which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does?
- A. Aerosols
  - B. Single hazard category
  - C. Flammable gas
  - D. Ignition
  - E. Oxidizing gas
  - F. None of the Above

200. Which of the following terms - of this hazard class are assigned to a single hazard category on the basis that, generally by providing oxygen, they cause or contribute to the combustion of other material more than air does?
- A. Aerosols
  - B. Single hazard category
  - C. Flammable gas means a gas
  - D. Substances and mixtures
  - E. Oxidizers
  - F. None of the Above

201. Currently, several workplace hazard communication systems cover oxidizers as?
- A. Aerosols
  - B. Single hazard category
  - C. Flammable gas means a gas
  - D. A class of chemicals
  - E. Oxidizers
  - F. None of the Above

**3.1.5 Gases under Pressure**

202. Which of the following terms - under pressure are gases that are contained in a receptacle at a pressure not less than 280 Pa at 20°C or as a refrigerated liquid?
- A. Flammable solids
  - B. Substances and mixtures
  - C. Gases
  - D. Physical state or compressed gases
  - E. Substances and mixtures of this hazard class
  - F. None of the Above

203. For this group of gases, the following information is required: vapor pressure at 50°C; physical state at 20°C at standard ambient pressure?
- A. Combustion of other material
  - B. Readily combustible solids
  - C. Basis of the flash point
  - D. Explosive, organic peroxides or as oxidizing
  - E. Critical temperature
  - F. None of the Above

204. Which of the following terms - that use the physical state or compressed gases will be a different classification basis for some workplace systems?

- A. Flammable solids
- B. Substances and mixtures
- C. Ignition or pressure
- D. Physical state or compressed gases
- E. Substances and mixtures of this hazard class
- F. None of the Above

### 3.1.6 Flammable Liquids

205. Which of the following terms - means a liquid having a flash point of not more than 93°C?

- A. Flammable liquid
- B. Readily combustible solids
- C. Flammable solids
- D. Explosive, organic peroxides or as oxidizing
- E. Critical temperature
- F. None of the Above

### 3.1.7 Flammable Solids

206. Which of the following terms - are solids that are readily combustible, or may cause or contribute to fire through friction?

- A. Flammable liquid
- B. Readily combustible solids
- C. Flammable solids
- D. Explosive, organic peroxides or as oxidizing
- E. Critical temperature
- F. None of the Above

207. Which of the following terms - are powdered, granular, or pasty substances which are dangerous if they can be easily ignited by brief contact with an ignition source?

- A. Flammable liquid
- B. Readily combustible solids
- C. Flammable solids
- D. Explosive, organic peroxides or as oxidizing
- E. Critical temperature
- F. None of the Above

208. Which of the following terms - are assigned to one of two hazard categories on the basis of the outcome of the UN Test N.1?

- A. Flammable solids
- B. Substances and mixtures
- C. Ignition or pressure
- D. Physical state or compressed gases
- E. Substances and mixtures of this hazard class
- F. None of the Above

### 3.1.8 Self-Reactive Substances

209. Which of the following terms - are thermally unstable liquids or solids liable to undergo a strongly exothermic thermal decomposition even without participation of oxygen?

- A. Combustion of other material
- B. Readily combustible solids
- C. Basis of the flash point
- D. Explosive, organic peroxides or as oxidizing
- E. Self-reactive substances
- F. None of the Above

### 3.1.12 Substances which on Contact with Water Emit Flammable Gases

210. Substances that, in contact with water, emit flammable gases are solids or liquids which, by interaction with water, are liable to become spontaneously flammable or to give off - this missing term - in dangerous quantities.

- A. Flammable solids
- B. Substances and mixtures
- C. Flammable gases
- D. Physical state or compressed gases
- E. Substances and mixtures of this hazard class
- F. None of the Above

### 3.1.13 Oxidizing Liquids

211. Which of the following terms - is a liquid which, while in itself not necessarily combustible, may, generally by yielding oxygen, cause or contribute to the combustion of other material?

- A. Combustible liquid
- B. Readily combustible liquid
- C. Basis of the flash point
- D. Explosive liquid
- E. An oxidizing liquid
- F. None of the Above

212. Substances and mixtures of this hazard class are assigned to one of three hazard categories on the basis of test results which measure ignition or pressure rise time compared to?

- A. Flammable solids
- B. Substances and mixtures
- C. Ignition
- D. Physical state or compressed gases
- E. Substances and mixtures of this hazard class
- F. None of the Above

### 3.2.2 Skin Corrosion

213. Which of the following terms - means the production of irreversible damage to the skin following the application of a test substance for up to 4 hours?

- A. Skin corrosion
- B. Harmonized approach
- C. Chemical action
- D. Structure/activity or structure property
- E. Organic radicals
- F. None of the Above

214. Substances and mixtures in this - this missing term - are assigned to a single harmonized corrosion category.

- A. Hazard class
- B. Harmonized approach
- C. Chemical class
- D. Structure/activity or structure property
- E. Organic class
- F. None of the Above

215. For Competent Authorities, such as transport packing groups, needing more than one designation for corrosivity, up to three subcategories are provided within the?

- A. Class
- B. Analysis
- C. Corrosive class
- D. Health and environmental criteria
- E. Corrosive category
- F. None of the Above

216. Several factors should be considered in determining the- this missing term - before testing is initiated: Human experience showing irreversible damage to the skin;

- A. Corrosion potential
- B. Harmonized approach
- C. Chemical potential
- D. Structure/activity or structure property
- E. Organic radicals
- F. None of the Above

217. Structure/activity or structure - this missing term - to a substance or mixture already classified as corrosive;

- A. Substances and mixtures
- B. Harmonized approach
- C. Chemical action
- D. Property relationship
- E. Organic relationship
- F. None of the Above

### 3.2.3 Skin Irritation

218. Which of the following terms - means the production of reversible damage to the skin following the application of a test substance for up to 4 hours?

- A. Chemical action
- B. Analysis of existing
- C. Corrosive
- D. Health and environmental criteria
- E. Skin irritation
- F. None of the Above

219. Substances and mixtures in this hazard class are assigned to a single irritant category. For those authorities, such as pesticide regulators, wanting more than one designation for skin irritation, an additional?

- A. Substances and mixtures
- B. Harmonized approach
- C. Chemical action
- D. Structure/activity or structure property
- E. Mild irritant category is provided
- F. None of the Above

220. Which of the following terms - should be considered in determining the irritation potential before testing is initiated: Human experience or data showing reversible damage to the skin following exposure of up to 4 hours;

- A. Several factors
- B. pH extremes
- C. Contact sensitizer
- D. Substances and mixtures in this hazard class
- E. Hypersensitivity
- F. None of the Above

221. Structure/activity or structure property relationship to a substance or mixture already classified as?

- A. Test substance
- B. An irritant
- C. Skin sensitizer
- D. Pesticide regulators
- E. Serious physical decay
- F. None of the Above

### 3.2.4 Eye Effects

222. Which of the following terms - should be considered in determining the serious eye damage or eye irritation potential before testing is initiated?

- A. Several factors
- B. pH extremes
- C. Contact sensitizer
- D. Substances and mixtures in this hazard class
- E. Hypersensitivity
- F. None of the Above

223. Structure/activity or structure property relationship to a - this missing term - already classified; pH extremes like  $\leq 2$  and  $\geq 11.5$  that may produce serious eye damage.

- A. Test substance
- B. pH extreme
- C. Contact sensitizer
- D. Substance or mixture
- E. Hypersensitivity
- F. None of the Above

224. Serious eye damage means the- this missing term - or serious physical decay of vision, following application of a test substance to the front surface of the eye.

- A. Test substance
- B. An irritant
- C. Skin sensitizer
- D. Pesticide regulators
- E. Serious physical decay
- F. None of the Above

225. Which of the following terms - in this hazard class are assigned to a single harmonized category.

- A. Several factors
- B. pH extremes
- C. Contact sensitizer
- D. Substances and mixtures
- E. Hypersensitivity
- F. None of the Above

226. Which of the following terms - means changes in the eye following the application of a test substance to the front surface of the eye, which are fully reversible within 21 days of application?

- A. Test substance
- B. An irritant
- C. Skin sensitizer
- D. Eye irritation
- E. Serious physical decay
- F. None of the Above

227. Substances and mixtures in this hazard class are assigned to?

- A. Several factors
- B. pH extremes
- C. Contact sensitizer
- D. Substances and mixtures in this hazard class
- E. A single harmonized hazard category
- F. None of the Above

128. For authorities, such as pesticide regulators, wanting more than one designation for eye irritation, - this missing term -, depending on whether the effects are reversible in 21 or 7 days.

- A. Test substance
- B. An irritant
- C. Skin sensitizer
- D. One of two subcategories can be selected
- E. Serious physical decay
- F. None of the Above

### 3.2.5 Sensitization

229. Which of the following terms - means a substance that induces hypersensitivity of the airways following inhalation of the substance?

- A. Several factors
- B. pH extremes
- C. Contact sensitizer
- D. Respiratory sensitizer
- E. Hypersensitivity
- F. None of the Above

230. Substances and mixtures in this hazard class are assigned to?

- A. Several factors
- B. pH extremes
- C. Contact sensitizer
- D. One hazard category
- E. Hypersensitivity
- F. None of the Above

231. Skin sensitizer means a substance that will induce an allergic response following skin contact. The definition for "skin sensitizer" is equivalent to?

- A. Contact sensitizer
- B. An irritant
- C. Skin sensitizer
- D. Reproductive and developmental effects
- E. Serious physical decay
- F. None of the Above

232. Substances and mixtures in this hazard class are assigned to?

- A. One hazard category
- B. An irritant
- C. Skin sensitizer
- D. Reproductive and developmental effects
- E. Serious physical decay
- F. None of the Above

233. Consideration should be given to classifying substances which cause immunological contact urticaria as?

- A. Several factors
- B. pH extremes
- C. Contact sensitizer
- D. Substances and mixtures in this hazard class
- E. Hypersensitivity
- F. None of the Above

### 3.2.6 Germ Cell Mutagenicity

234. Which of the following terms - means an agent giving rise to an increased occurrence of mutations in populations of cells and/or organisms?

- A. Mutagen
- B. A single exposure mutagen
- C. Known or presumed mutagen
- D. Only in animal studies mutagen
- E. Reproductive and developmental effects
- F. None of the Above

### 3.2.7 Carcinogenicity

235. Which of the following terms - means a chemical substance or a mixture of chemical substances which induce cancer or increase its incidence?

- A. Death following aspiration
- B. Carcinogen
- C. The basis of viscosity
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class (TOST)
- F. None of the Above

236. Which of the following terms - in this hazard class are assigned to one of two hazard categories?

- A. The harmonized criteria
- B. A single exposure
- C. Known or presumed
- D. Reproductive and developmental effects
- E. Substances and mixtures
- F. None of the Above

### 3.2.8 Reproductive Toxicity

237. Which of the following terms - includes adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in offspring?

- A. Death
- B. Reproductive toxicity
- C. The basis of viscosity
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class (TOST)
- F. None of the Above

238. Substances and mixtures with reproductive and/or developmental effects are assigned to one of two hazard categories, 'known or presumed' and?

- A. The harmonized criteria
- B. A single exposure
- C. Suspected
- D. Only in animal studies
- E. Reproductive and developmental effects
- F. None of the Above

239. Category 1 has two subcategories for reproductive and?

- A. Death
- B. Developmental effects
- C. The basis of viscosity
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class (TOST)
- F. None of the Above

### 3.2.9 Target Organ Systemic Toxicity (TOST): Single Exposure & Repeated Exposure

240. Some existing systems distinguish between single and repeat exposure for these effects and?

- A. The harmonized criteria
- B. Some do not
- C. Known or presumed
- D. Only in animal studies
- E. Non-lethal target organ/systemic toxicity class (TOST)
- F. None of the Above

241. Which of the following terms - not otherwise specifically included in the GHS, that can impair function, both reversible and irreversible, immediate and/or delayed are included in the non-lethal target organ/systemic toxicity class?

- A. Death
- B. All significant health effects
- C. The basis of viscosity
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class
- F. None of the Above

242. Narcotic effects and - this missing term - are considered to be target organ systemic effects following a single exposure.

- A. The harmonized criteria
- B. A single exposure
- C. Known or presumed
- D. Respiratory tract irritation
- E. Trachea and lower respiratory system
- F. None of the Above

### 3.2.10 Aspiration Hazard

243. Which of the following terms - includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration?

- A. Death following aspiration
- B. An aspiration hazard in humans
- C. Aspiration toxicity
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class
- F. None of the Above

244. Which of the following terms - is the entry of a liquid or solid directly through the oral or nasal cavity, or indirectly from vomiting, into the trachea and lower respiratory system?

- A. Death following aspiration
- B. An aspiration hazard in humans
- C. Aspiration
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class
- F. None of the Above

245. Some hydrocarbons and certain chlorinated hydrocarbons have been shown to pose an - this missing term - in humans.

- A. Death following aspiration
- B. Aspiration hazard in humans
- C. Aspiration hazard
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class
- F. None of the Above

246. Primary alcohols, and ketones have been shown to pose an \_\_\_\_\_ only in animal studies.

- A. Death following aspiration
- B. Aspiration hazard in humans
- C. Aspiration hazard
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class
- F. None of the Above

247. Substances and mixtures of - this missing term - are assigned to one of two hazard categories this hazard class on the basis of viscosity.

- A. This hazard class
- B. An aspiration hazard in humans
- C. The basis of viscosity
- D. Reproductive and developmental effects
- E. Non-lethal target organ/systemic toxicity class
- F. None of the Above

### 3.3 Environmental Hazards

#### 3.3.1 Hazardous to the Aquatic Environment

248. The harmonized criteria are - this missing term - for packaged goods in both supply and use in multi-modal transport schemes.

- A. Considered suitable
- B. A single exposure
- C. Known or presumed
- D. Only in animal studies
- E. Complex substance
- F. None of the Above

249. Which of the following terms - of it may be used for bulk land transport and bulk marine transport under MARPOL insofar as this uses aquatic toxicity?

- A. The harmonized criteria
- B. A single exposure
- C. Known or presumed
- D. Only in animal studies
- E. Complex substance
- F. None of the Above

#### 3.3.1.1 Acute Aquatic Toxicity

250. Which of the following terms - means the intrinsic property of a material to cause injury to an aquatic organism in a short-term exposure?

- A. Acute aquatic toxicity
- B. An aspiration hazard in humans
- C. Complex substance
- D. Reproductive and developmental effects
- E. Chronic aquatic toxicity
- F. None of the Above

251. Substances and mixtures of this hazard class are assigned to one of three toxicity categories on the basis of acute toxicity data: LC<sub>50</sub> or EC<sub>50</sub> or ErC<sub>50</sub>. In some regulatory systems these acute toxicity categories may be subdivided or?

- A. The harmonized criteria
- B. A single exposure
- C. Known or presumed
- D. Degradation/bioaccumulation
- E. Extended for certain sectors
- F. None of the Above

#### 3.3.1.2 Chronic Aquatic Toxicity

252. Which of the following terms - means the potential or actual properties of a material to cause adverse effects to aquatic organisms during exposures that are determined in relation to the lifecycle of the organism?

- A. Acute aquatic toxicity
- B. An aspiration hazard in humans
- C. Complex substance
- D. Reproductive and developmental effects
- E. Chronic aquatic toxicity
- F. None of the Above

253. Which of the following terms - are assigned to one of four toxicity categories on the basis of acute data and environmental fate data: LC<sub>50</sub> or EC<sub>50</sub> or ErC<sub>50</sub>?

- A. Cutoff value/concentration limits
- B. Potential or actual properties
- C. Hazards
- D. Substances and mixtures in this hazard class
- E. Two or more substances
- F. None of the Above

254. While experimentally derived test data are preferred, where no experimental data are available, validated Quantitative Structure Activity Relationships for aquatic toxicity and log KOW may be used in the?

- A. GHS
- B. Classification process
- C. Potential or actual properties
- D. Complex substance
- E. Stability of the substance composition
- F. None of the Above

### 3.4 What is the GHS approach to classifying mixtures?

255. For consistency and understanding - this missing term - the GHS defines certain terms.

- A. Cutoff value/concentration limits
- B. Provisions for classifying mixtures
- C. Hazards
- D. Degradation/bioaccumulation
- E. Two or more substances
- F. None of the Above

256. Substance: Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the - this missing term - or changing its composition.

- A. GHS
- B. No experimental data
- C. Potential or actual properties
- D. Complex substance
- E. Stability of the substance
- F. None of the Above

257. Mixture: Mixtures or solutions composed of - this missing term - in which they do not react.

- A. Cutoff value/concentration limits
- B. Potential or actual properties
- C. Hazards
- D. Degradation/bioaccumulation
- E. Two or more substances
- F. None of the Above

258. Alloy: An alloy is a metallic material, - this missing term -, consisting of two or more elements so combined that they cannot be readily separated by mechanical means.

- A. Homogeneous on a macroscopic scale
- B. Hazardous properties of chemicals
- C. Potential or actual properties
- D. Complex substance
- E. Stability of the substance composition
- F. None of the Above

259. Where impurities, additives or individual constituents of a substance or mixture have been identified and are themselves classified, they should be taken into account during classification if they exceed the cutoff value/concentration limit for a?

- A. Cutoff value/concentration limit
- B. Given hazard class
- C. Hazards
- D. Degradation/bioaccumulation
- E. Hazardous properties of chemicals
- F. None of the Above

### 3.5 What are bridging principles?

260. Which of the following terms - are an important concept in the GHS for classifying untested mixtures?

- A. GHS
- B. Bridging principles
- C. Potential or actual properties
- D. Complex substance
- E. Stability of the composition
- F. None of the Above

261. Dilution: If a mixture is diluted with a diluent that has an equivalent or lower toxicity, then the hazards of the new mixture are assumed to?

- A. Cutoff value/concentration limit
- B. GHS
- C. Hazards
- D. Be equivalent to the original
- E. Two or more substances
- F. None of the Above

262. Batching: If a batch of a complex substance is produced under - this missing term - then the hazards of the new batch are assumed to be equivalent to the previous batches.

- A. GHS
- B. Degradation/bioaccumulation
- C. Potential or actual properties
- D. Controlled process
- E. Stability of the substance
- F. None of the Above

263. Concentration of Highly Toxic Mixtures: If a mixture is severely hazardous, then a concentrated mixture is also assumed to?

- A. Cutoff value/concentration limit
- B. Be severely hazardous
- C. Hazards
- D. Degradation/bioaccumulation
- E. Two or more substances
- F. None of the Above

264. Interpolation within One Toxic Category: Mixtures having component concentrations within a range where the hazards are known are assumed to have those?

- A. GHS
- B. Known hazards
- C. Potential or actual properties
- D. Complex substance
- E. Composition
- F. None of the Above

265. Substantially Similar Mixtures: Slight changes in the concentrations of components are not expected to change the hazards of a mixture and substitutions involving toxicologically similar components are not expected to change the?

- A. Cutoff value/concentration limit
- B. Hazards of a mixture
- C. Hazards
- D. Degradation/bioaccumulation
- E. Two or more substances
- F. None of the Above

266. Aerosols: An aerosol form of a mixture is assumed to have the same- this missing term - as the tested, non-aerosolized form of the mixture unless the propellant affects the hazards upon spraying.

- A. Cutoff value/concentration limit
- B. GHS
- C. Hazards
- D. Degradation/bioaccumulation
- E. Two or more substances
- F. None of the Above

267. All bridging principles do not apply to every health and environmental endpoint. Consult each endpoint to determine which - this missing term - apply.

- A. Bridging principles
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

268. When the bridging principles do not apply or - this missing term -, the health and environmental hazards of mixtures are estimated based on component information.

- A. GHS
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

#### 4.0 Hazard Communication

269. As in existing systems, labels and - this missing term - are the main tools for chemical hazard communication. They identify the hazardous properties of chemicals that may pose a health, physical or environmental hazard during normal handling or use.

- A. GHS
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

270. Which of the following terms - is to identify the intrinsic hazards found in chemical substances and mixtures, and to convey information about these hazards?

- A. GHS
- B. Environmental hazards
- C. Chemical products
- D. The goal of the GHS
- E. Hazardous properties of chemicals
- F. None of the Above

271. The international mandate for the GHS included the development of a harmonized hazard communication system, including labeling, Safety Data Sheets and easily understandable symbols, based on the classification criteria developed for the?

- A. GHS
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

#### 4.1 What factors influenced development of the GHS communication tools?

272. Early in the process of developing - this missing term - several significant issues were recognized.

- A. GHS communication tools
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

273. One of the most important was comprehensibility of the information provided. After all, the aim of the system is to present hazard information in a manner that the intended audience can easily understand and that will thus minimize the possibility of adverse effects resulting from?

- A. Exposure
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

274. The GHS identifies some guiding principles to assist in this process: Information should be conveyed in more than one way, e.g.?

- A. Text and symbols
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

275. The comprehensibility of the components of the system should take account of existing studies and literature as well as any evidence gained from?

- A. GHS
- B. Environmental hazards
- C. Testing
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

276. The phrases used to indicate degree (severity) of hazard should be consistent across the health, physical and?

- A. GHS
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

## 4.2 Labels

### 4.2.1 What does a label look like?

277. Existing systems have labels that look different for the?

- A. GHS
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

278. Different agencies regulate the workplace, consumers, agricultural chemicals and transport- this missing term - for these sectors/target audiences vary both in the U.S. and globally.

- A. Labels
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

### Transport and Emergency Responders

279. For hazardous products being transported, outer containers have required label elements, product identifier and hazard symbols- this missing term - are in addition to workplace or end use label requirements.

- A. Transportation requirements
- B. Environmental hazards
- C. Chemical products
- D. Safety Data Sheets
- E. Hazardous properties of chemicals
- F. None of the Above

### Agricultural Chemicals and Pesticides

280. A pesticide product with the same hazards as ToxiFlam would have a label developed using?

- A. Pictogram
- B. FIFRA requirements
- C. Hazards
- D. Purple Book
- E. GHS hazard class and category
- F. None of the Above

281. Which of the following terms - has requirements for product identity, chemical identity, signal word, hazard statements, and precautionary measures including first aid?

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. FIFRA
- E. Hazard statements
- F. None of the Above

#### 4.3 What are the GHS label elements?

282. Some \_\_\_\_\_ have been standardized (identical with no variation) and are directly related to the endpoints and hazard level. Other label elements are harmonized with common definitions and/or principles.

- A. Pictogram
- B. GHS
- C. Hazards
- D. GHS label elements
- E. GHS hazard class and category
- F. None of the Above

The standardized label elements included in the GHS are:

283. Symbols: Convey health, physical and environmental hazard information, assigned to a?

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. GHS hazard class and category
- E. Hazard statements
- F. None of the Above

284. Signal Words: "Danger" or "Warning" are used to emphasize hazards and indicate the relative level of severity of the hazard, assigned to a?

- A. Pictogram
- B. GHS
- C. Hazards
- D. Purple Book
- E. GHS hazard class and category
- F. None of the Above

285. Hazard Statements: Standard phrases assigned - this missing term - and category that describe the nature of the hazard.

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. Hazard class
- E. Hazard statements
- F. None of the Above

286. The symbols, signal words, and hazard statements have all been standardized and assigned to specific hazard categories and classes, as appropriate. This approach makes it easier for countries to implement the system and should make it easier for companies to comply with regulations based on the?

- A. Pictogram
- B. GHS
- C. Hazards
- D. Purple Book
- E. GHS hazard class and category
- F. None of the Above

287. The use of symbols, signal words or hazard statements other than those that have been assigned to each - this missing term - would be contrary to harmonization.

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. FIFRA
- E. Hazard statements
- F. None of the Above

288. The Section numbers refer to the sections in - this missing term - or "Purple Book".

- A. Pictogram
- B. GHS
- C. Hazards
- D. GHS Document
- E. GHS hazard class and category
- F. None of the Above

#### 4.3.1 Symbols/Pictograms

289. The GHS symbols have been incorporated into pictograms for use on the?

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. GHS label
- E. Hazard statements
- F. None of the Above

290. For transport, - this missing term - will have the background, symbol and colors currently used in the UN Recommendations on the Transport of Dangerous Goods, Model Regulations.

- A. Pictograms
- B. GHS
- C. Hazards
- D. Purple Book
- E. GHS hazard class and category
- F. None of the Above

291. A black frame may be used for shipments within one country. Where a transport pictogram appears, the- this missing term - for the same hazard should not appear.

- A. GHS pictograms
- B. GHS symbols
- C. GHS hazards
- D. FIFRA
- E. Hazard statements
- F. None of the Above

#### 4.3.2 Signal Words

292. The signal word indicates the relative degree of?...

- A. Pictogram
- B. GHS
- C. Hazards
- D. Severity a hazard
- E. GHS hazard class and category
- F. None of the Above

293. "Danger" for the more?

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. Severe hazards
- E. Hazard statements
- F. None of the Above

294. "Warning" for the?

- A. Pictogram
- B. GHS
- C. Hazards
- D. Less severe hazards
- E. GHS hazard class and category
- F. None of the Above

295. Which of the following terms - are standardized and assigned to the hazard categories within endpoints?

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. Signal words
- E. Hazard statements
- F. None of the Above

#### 4.3.3 Hazard Statements

296. An appropriate statement for each - this missing term - should be included on the label for products possessing more than one hazard.

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazard
- D. Signal words
- E. Hazard statements
- F. None of the Above

**Other GHS label elements include:**

297. Precautionary Statements and - this missing term -: Measures to minimize or prevent adverse effects.

- A. Pictograms
- B. GHS symbols
- C. GHS hazards
- D. Signal words
- E. Hazard statements
- F. None of the Above

298. Product Identifier: Name or number used for a hazardous product on a label or in the?

- A. GHS pictogram
- B. GHS symbols
- C. GHS hazards
- D. SDS
- E. Hazard statements
- F. None of the Above

299. Supplier identification: The name, address and telephone number should be provided on?

- A. The label
- B. Annex 3
- C. GHS label
- D. Prevent adverse effects
- E. Precautionary information
- F. None of the Above

300. Supplemental information?

- A. Name or number
- B. Annex 3
- C. The label
- D. Non-harmonized information
- E. UN proper shipping name
- F. None of the Above