

Environmental Hazards of Highway Work Syllabus

Time: 4 hours

Maximum Class Size: 20

Prerequisites: None

Course Description: In addition to transportation incidents, other fatalities incurred during highway work include exposure to harmful substances and fire or explosion. This course will help workers develop an understanding of the many hazards they face when doing highway work including wildfire ash, silica dust, disease-causing insects, toxic substances, biological hazards, scorpions and rattlesnakes.

Goals/Objectives/Student Learning Outcomes:

At the end of the 4-hour Environmental Hazards of Highway Work course, the participant will be able to:

1. describe basic first aid procedures necessary for work area safety.
2. identify the symptoms and appropriate treatment for a person who has been affected by a poisonous plant, insect, spider, scorpion or snake.
3. describe first aid to stop bleeding
4. describe the signs and symptoms of exposure to weed killer and polychlorinated biphenyls (PCBs) and list and describe at least two methods to reduce exposure to each substance.
5. describe the signs and symptoms of exposure to silica dust and wildfire ash.
6. describe what to do if biological hazards are discovered in the work area.
7. list at least three ways bloodborne (carried in the blood) pathogens can enter the body and list and identify control measures to prevent exposure to bloodborne pathogens.
8. list and identify the PPE that can be used to control exposure to bloodborne pathogens.

Standards

- | | |
|--------------------|-------------------------------|
| • 29 CFR 1926.28 | Personal Protective Equipment |
| • 29 CFR 1926.21 | Safety Training and Education |
| • 29 CFR 1926.52 | Occupational Noise Exposure |
| • 29 CFR 1910.1200 | Hazard Communication |
| • 29 CFR 1926.1153 | Silica |

Environmental Hazards of Highway Work Syllabus

Classroom Rules and Procedures

- All classes begin at 11:00 am and end at 3:00 pm
- Upon entering classroom, all participants must sign in and be seated by 11:00 am.
- Class will consist of a combination of lecture, video, demonstration, coached group exercises, individual exercises and assessment.
- Students are required to report to class ready to work and maintain the provided PPE.

Textbooks/Readings/Materials

- LIUNA: *Environmental Hazards of Highway Work* IG/PG
- LTS Environmental Hazards of Highway Work Student Handout Packet & IV
- LTS Environmental Hazards of Highway Work Exit Exams A & B, AS & Keys

Personal Protective Equipment

- 20 pairs of gloves
- 20 pairs of safety glasses
- 20 pairs of ear plugs
- 20 hard hats

Course Requirements

To receive credit for the course, participants must:

- Be present for full four hours
- Participate in all classroom exercises
- Pass a written exam

Course Policies

- Participants must be on-time and ready to work.
- Participants must return from breaks on-time.
- Participants must participate in each exercise and assignment

Assessment and Grading

Participants will be assessed on the following:

- All written exams must be passed with a score of 80% or above.

Environmental Hazards of Highway Work Syllabus

Safety

Failure to maintain and use PPE may result in dismissal from the course.