

Worksite: \_\_\_\_\_ Instructor: \_\_\_\_\_ Date/Time: \_\_\_\_\_

**TOPIC C782: GHS ENVIRONMENTAL HAZARDS**

**Introduction:** In this meeting we'll look at the Global Harmonized System (GHS) hazards to aquatic environments. It's important to know how different hazards affect the environment.

**Hazardous to the Aquatic Environment**

The harmonized criteria are suitable for both the supply and transport of packaged goods. Elements may be used for bulk land transport and bulk marine transport under the International Convention for the Prevention of Pollution from Ships. Annexes 8 and 9 of the GHS Document covers issues such as data interpretation and the application of the criteria to special substances. Considering the complexity and the breadth of the application, the Guidance Annexes are important in the application of the harmonized criteria.

Acute & Chronic Aquatic Toxicity				
	Category I	Category II	Category III	Category IV
Acute	Acute toxicity ≤ 1.00 mg/l	Acute toxicity > 1.00 but ≤ 10.0 mg/l	Acute toxicity ≤ 10.0 but < 100 mg/l	—
Chronic	Acute toxicity ≤ 1.00 mg/l and lack of rapid	Acute toxicity > 1.00 but ≤ 10.0 mg/l and lack of rapid degradability	Acute toxicity > 10.0 but ≤ 100.0 mg/l and lack of rapid degradability	Acute toxicity > 100 mg/l and lack of rapid degradability

**Acute Aquatic Toxicity**

Acute aquatic toxicity means the ability of a material to injure an organism in water in a short-term exposure. Substances and mixtures of this hazard class are assigned to one of three toxicity categories based on acute toxicity data.

**Chronic Aquatic Toxicity**

Chronic aquatic toxicity means the potential or actual properties of a material to cause adverse effects to aquatic organisms during exposures based on the lifecycle of the organism. Substances and mixtures in this hazard class are assigned to one of four toxicity categories (I-IV) based on acute data *and* environmental fatality data.

**Bioaccumulation Potential**

A chemical with bioaccumulation potential has the potential to build up in the tissue of an aquatic human food chain organism and forms one component of the toxicity/mobility/persistence/bioaccumulation factors within the human food chain threat.

**Rapid Degradability**

Some substances degrade more quickly in the natural environment than others. A substance with rapid degradability can be quickly removed from the environment by natural processes, whereas a substance without rapid degradability can exert any toxic effects further through time and in more space.

**Conclusion:** The GHS provides a way to determine whether a substance is hazardous to aquatic environments. It also describes the extent that the substance can cause harm to those environments for long-term and short-term exposures. Transport, handle and use substances that have these types of hazards with care to prevent environmental harm.

**Employee Attendance:**(Names or signatures of personnel who are attending this meeting)

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These guidelines do not supersede local, state or federal regulations, and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.