"The Haz's" Reference Matrix

This matrix is intended to provide a quick reference for employers and workers to determine which hazardous chemical, material, or substance regulations apply to their operations.

Acronym	"HazCom"	"Hazmat"	"Hazwaste"	"HAZWOPER"	"PSM"
Title	Hazard Communication	Hazardous Materials	Hazardous Waste	Hazardous Waste Operations and Emergency Response	Process Safety Management
Regulator/Agency	Occupational Safety and Health Administration (OSHA)	Pipeline and Hazardous Materials Safety Administration (PHMSA)	Environmental Protection Agency (EPA)	Occupational Safety and Health Administration (OSHA)	Occupational Safety and Health Administration (OSHA)
Regulation	29 CFR 1910.1200 (GI); 1926.59 (construction)	49 CFR Parts 171-180	40 CFR Parts 260-299	29 CFR 1910.120 (GI); 1926.65 (construction)	29 CFR 1910.119 (GI); 1926.64 (construction)
Key Definition(s)	29 CFR 1910.1200(c): *Hazardous chemical* means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, or hazard not otherwise classified.	49 CFR 105.5: *Hazardous material* means a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 U.S.C. 5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions in part 173 of subchapter C of this chapter.	Hazardous waste means - (A) A waste or combination of wastes as defined in 40 CFR 261.3, or (B) Those substances defined as hazardous wastes in 49 CFR 171.8. Quick definition is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources, ranging from industrial manufacturing process wastes to batteries and may come in many forms, including liquids, solids, gases, and sludges. See our ezExplanation: https://www.jjkellerportal.com/regsense/details/e11hazwas0	29 CFR 1910.120(a)(3): *Hazardous substance* means any substance designated or listed under paragraphs (A) through (D) of this definition, exposure to which results or may result in adverse effects on the health or safety of employees: (A) Any substance defined under section 103(14) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (see 42 U.S.C. 9601(14)). (B) Any biological agent or other disease-causing agent that, after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction), or physical deformations in such persons or their offspring; (C) Any substance listed by the U.S. Department of Transportation as hazardous materials under 49 CFR 172.101 and appendices; and (D) Hazardous waste as defined under 40 CFR 261.3 or 49 CFR 171.8. The term "hazardous substance" as defined by 1910.120 and 1926.65 should not be confused with the definition of "hazardous chemical" in 29 CFR 1910.1200, Hazard Communication.	29 CFR 1910.119(b): *Highly hazardous chemical* means a substance possessing toxic, reactive, flammable, or explosive properties and specified by paragraph (a)(1) of this section [1910.119].
Key Indicator	Employers must follow HazCom rules if they use or store hazardous chemicals that workers could be exposed to during regular work or in an emergency.	Employers must follow Hazmat rules when PHMSA finds that loading, unloading, or handling certain substances or materials could be a significant danger to health, safety, and property during transport.	Employers must follow Hazwaste regulations if they create, handle, transport, store, or dispose of hazardous waste that can harm human health or the environment.	HAZWOPER compliance is needed for cleaning up and responding to waste spills or releases. This covers the treatment, storage, and disposal (TSD) of substances identified as EPA hazardous waste, DOT hazardous materials, biological agents, and substances regulated by EPA's CERCLA.	Employers must follow PSM rules to prevent or reduce the impact of dangerous releases of toxic, reactive, flammable, or explosive chemicals. These releases can cause toxic, fire, or explosion hazards.
Scope	Chemical manufacturers and importers must identify hazards of the chemicals they handle. Employers must inform their workers about these hazards using a communication program, labels, safety data sheets, and training. Distributors must provide this information to employers.	This applies to people who make or maintain packaging or parts of packaging that are labeled or certified for transporting hazardous materials.	**Very Small Quantity Generators (VSQG):** Up to 220 lbs of non-acute hazardous waste, 2.2 lbs of acute hazardous waste, or 220 lbs of residue or contaminated soil, water, or debris. **Small Quantity Generators (SQG):** More than 220 lbs but less than 2,200 lbs of non-acute hazardous waste, up to 2.2 lbs of acute hazardous waste, or less than 220 lbs of residue or contaminated soil, water, or debris. **Large Quantity Generators (LQG):** 2,200 lbs or more of non-acute hazardous waste, 2.2 lbs of acute hazardous waste, or 220 lbs of	If an employer cannot prove that employees are not exposed to safety or health hazards, these standards apply: clean-up operations at uncontrolled hazardous waste sites, corrective clean-up operations, voluntary clean-up operations at government-recognized hazardous waste sites, hazardous waste operations at TSD facilities, and emergency response operations for releases or threats of hazardous substances.	This applies to processes with chemicals at or above threshold quantities (TQs) listed in Appendix A, Category 1 flammable gases or flammable liquids with a flashpoint below 100°F in quantities of 10,000 pounds or more, hydrocarbon fuels used solely for workplace consumption, and flammable liquids with a flashpoint below 100°F stored in atmospheric tanks or transferred without refrigeration.
Key Components	Hazard Classification by Chemical Manufacturers and Importers Chemical Evaluation by Manufacturers, Importers, and Employers Written Program Chemical Inventory Safety Data Sheets (SDSs) Container Labeling Emergency Procedures Employee Training Trade Secrets	Hazard Classification for Packaging and Shipping Markings, Labels, and Placards Material Segregation Emergency Procedures Incident Reporting to National Response Center Hazmat Security Employee Training	Classify waste based on monthly generation. Obtain an EPA identification number. Develop emergency procedures and contingency plans. Label and mark containers correctly. Package and label shipments with required manifests. Follow storage rules to prevent releases. Control air emissions. Adhere to recycling and disposal restrictions. Minimize waste for large quantity generators (LQG). Meet requirements before transporting waste. Submit biennial reports for LQG. Keep required records. Train employees based on waste generation classification.	Create a safety plan and site control program. Develop an Emergency Response Plan (ERP) and procedures. Appoint an Emergency Coordinator. Establish post-emergency response procedures (cleanup, disposal, etc.). Provide employee training (varies by operations).	Safety Plan and Procedures Emergency Planning and Response Process Hazard Analysis (PHA) Safety Data Sheets (SDSs) Good Engineering Practices (GAGEP) Contractor Requirements Pre-startup Review Mechanical Integrity Equipment Inspection and Testing Quality Assurance (QA) Hot Work Permits Management of Change (MOC) Incident Investigation Compliance Audits (every three years) Trade Secrets Employee Training
Training	**Initial Training:** Conduct training when first assigned to work with a hazardous chemical. **Periodic Training:** Provide training when hazards change or new chemical hazards are introduced. **Annual Training:** Recommended as an industry best practice. **Documentation:** Also recommended as an industry best practice.	**Initial Training**: Conduct training within 90 days of employment or job function assignment. **Refresher Training**: Provide training at least once every three years. **Previous Training**: Training from a previous employer may count. **Documentation**: Keep records of training details for three years from the last training date, and for 90 days after an employee leaves.	**Based on amount of generated waste:** **VSQG:** No training required. **SQG:** Initial training and annual refresher recommended. **LQG:** Initial and annual training required.	**General Site Workers**: 40 hours of off-site training and 3 days of field experience. **Occasional Site Workers unlikely to be exposed**: 24 hours of off-site training and 1 day of field experience. **Regular On-Site Workers in safe areas**: 24 hours of off-site training and 1 day of field experience. **Supervisors and On-Site Management**: An additional 8 hours of training on management topics. **Annual Refresher Training**: 8 hours every year.	**Initial Training:** First-time training or for those with previous skills. **Refresher Training:** Repeat training every three years or more often if needed. **Process Maintenance Training:** Training on how to keep processes running smoothly. **Documentation:** Keep records of who was trained, when, and how we know they understood.
Exemptions	Hazwaste subject to RCRA Substances in CERCLA remedial/removal actions Tobacco/tobacco products Food/alcohol in retail or for personal consumption Articles (as defined at 1910.1200(c)) Cosmetics in retail or for personal use Certain drugs and consumer products Certain wood/woods products not being processed Certain nuisance particles Ionizing/nonionizing radiation Biological hazards	Packing Groups II and III excepted from labeling, marking, placarding, and shipping requirements. Domestic shipping of certain small quantities. Materials of Trade - Certain hazardous material classes that are transported by a private motor carrier, for the purpose of direct support of its business. Certain high-flashpoint Class 3 flammable liquids (diesel fuel, gasoline, kerosene, etc.)	Household hazardous waste (HHW) Materials not meeting the definition of solid waste. Certain solid wastes (agriculture, mining overburden and mineral processing waste, fossil fuel combustion waste, geothermal, trivalent chromium, cement kiln dust, arsenically treated wood, injected groundwater, used oil filters and distillation bottoms, etc.)	Emerency Action Plan in lieu of ERP (if ALL persons are to evacuate)	Standard does not cover: retail facilities, oil or gas well drilling or service operations, or normally occupied remote facilities.
Need Assistance?	Still unsure of which "Haz" applies? Our **Experts** are here to help! Let our team of in-house experts — acknowledged leaders in the safety, regulatory and compliance fields with over 500 years of combined experience — help answer your toughest compliance questions.				