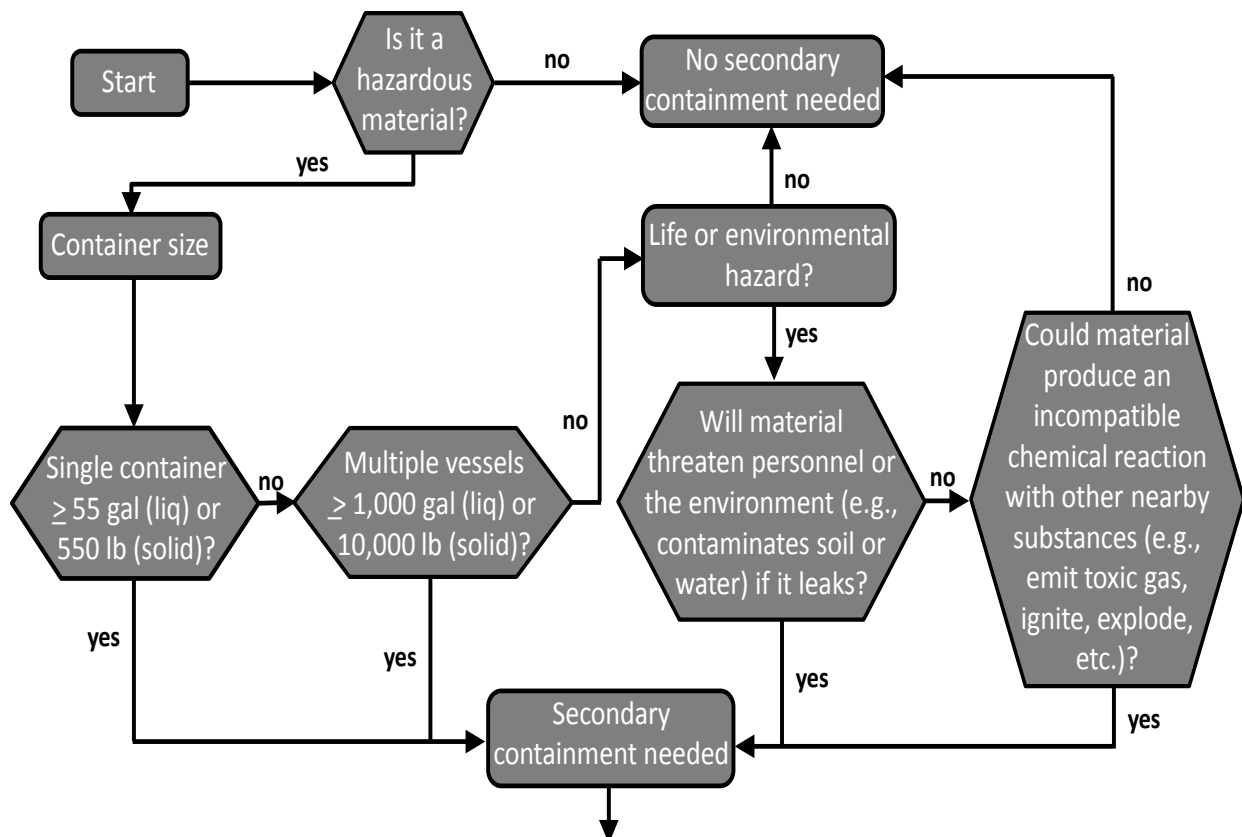


Secondary Containment for Hazardous Materials Storage Guidelines

Secondary containment is defined as a means of surrounding one or more primary storage containers to collect any hazardous material spillage in the event of loss of integrity or container failure. Hazardous materials must be stored in secondary containers to prevent or minimize the possibility of accidental release as well as to ensure compliance with certain local, state and federal regulations dealing with chemical storage. Hazardous materials includes, but not limited to chemicals, hazardous waste and oil-filled equipment. Please refer to the secondary containment flow chart below for assistance in determining if secondary containment is required.

Secondary Containment Decision Process



Contain 110% of the volume of the largest container. If multiple containers, must contain either 10% of the aggregate volume or 150% of the largest container, whichever is greater. If in an interior Haz Mat storage room, must also contain 20 minutes of sprinkler flow, at the design flow rate for that area, plus the volume of the chemical container. If stored in an exterior storage area and open to rainfall, must contain the volume of the chemical container plus the volume of a 24-hour rainfall as determined by a 25-year storm and provisions shall be made to drain accumulations of the rainwater.

SECONDARY CONTAINMENT REQUIREMENTS

- All liquid hazardous materials must be in approved secondary containment to prevent release and uncontrolled:
 - mixing of incompatible chemicals
 - discharge of hazardous materials through unplugged drains, cups sinks, storm drains, sewers, etc.
 - damage associated with liquid materials leaking through tile and concrete floors to workplaces below.
- All liquid hazardous materials must be in approved secondary containment whenever stored on a floor.
- All hazardous materials must be in approved secondary containment whenever it has been declared a waste.
- Hazardous materials stored in non-approved or sub-standard storage cabinets or units that may pose an additional risk (flammables or oxidizers in wood cabinets) must be placed in secondary containment until an approved storage unit is installed.
- Secondary containment is required whenever specified by a federal, state or local regulation.

CONTAINMENT VOLUME

- Secondary containment for a single container will be 110 percent of the primary container.
- Secondary containment for multiple containers will be 150 percent of the largest containers volume or 10 percent of the aggregate volumes of all the containers, whichever is greater.

CONTAINMENT CONSTRUCTION

- Secondary containment must be compatible with the stored materials and be constructed of materials capable of containing a spill or leak.