MISSISSIPPI STATE UNIVERSITY EXTENSION

MSU DAWG TRACKS

What is secondary containment?
Secondary containment is defined as containment that is external and separate from the primary container; an additional level of containment necessary to isolate a hazardous material from reaching nearby areas. Secondary containment prevents spills or accidental discharges from spreading and causing additional problems.

So then, what is considered a hazardous material?
Chemicals or substances which are physical hazards or health hazards.

Physical hazards – combustible liquid, cryogenic fluid, explosive, flammable, organic peroxide, oxidizer, pyrophoric, unstable (reactive) material or water-reactive material.

Health hazards - pose a risk to people from handling or exposure; it includes chemicals that are toxic and corrosive.

The need for secondary containment is usually based on quantity or location of the hazardous material.
Regulations are stricter for indoor areas & liquids than they are for outdoor areas & solids.

EPA requires secondary containment of petroleum-based products (oils, fuels) in bulk storage containers or oil-filled equipment with a capacity of 55 gallons or more.

Fire code requirements are based off location (indoor or outdoor), use (storage or open/closed use system), the building layout, & quantities of all hazardous materials in the area.

Pesticide policy requires secondary containment for all unpacked containers in storage.

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Secondary containment can be active or passive so discharge cannot escape the device.
Active secondary containment is when an employee personally contains a spill or discharge:

- Deploying drain covers before a spill happens.
- Deploying drain covers after a spill has occurred, but before it reaches a drain.
- Using a spill kit in the event of a hazardous material discharge.
- Closing a gate valve prior to a discharge.

Passive secondary containment does not require deployment or the action of an employee or employees to contain a spill or discharge. Passive secondary containment includes:

- Placing containment pans or containment pallets or decks under drums and other containers.
- Surrounding machines and containers with berms.
- Erecting retaining walls around tanks.
- Placing drip trays or pads under leaky equipment.

Whether containment is active or passive or general or specific, the goal is always the same: preventing a hazardous material from being discharged into the surrounding environment.

Having the ability to contain spills at or near their source helps minimize the potential for discharge onto the floor, ground, or outdoor waters; or can prevent the spread of fire and flammable vapors; or can prevent health or physical hazards potentially resulting in a variety of bad scenarios.

Sources:
https://www.newpig.com/expertadvice/shedding-light-on-spccs-secondary-containment-requirements/
- International Fire Code : 202; table 5003.1.1; 5004.2.2; 5005.3.7; 5703.4
- https://www.dafvm.msstate.edu/sites/default/files/2019-08/dafvm-guidelines-for-pesticide-final-draft_0.pdf