# BMP C02: Hazardous Materials Management

## Pollutants of Concern:
- Metals
- Organics
- Trash & Debris
- Oil & Grease

## Purpose:
To prevent or reduce the discharge of hazardous materials into the storm water conveyance system during material handling and storage.

## Application:
Hazardous materials management and storage areas

## Practices:

**Material Data Safety Sheets (MSDSs)** must be readily available for all hazardous materials and should be followed for details regarding labeling, storage, handling, cleanup, and proper disposal.

**Labeling**
1. Label all containers of hazardous materials with the following:
   - The identity of the substance as shown on the MSDS
   - The appropriate hazard warning (health and physical hazards)
2. Labels must be legible and written in waterproof, permanent marker.
3. All unlabeled products that cannot be identified must be disposed of through EH&S. Fax or email collection request to (858) 534-9708 or hazwaste@ucsd.edu

**Storage**
1. Containers used to store hazardous materials will be in good condition and not leaking.
2. Containers will be kept closed except when adding or removing hazardous materials.
3. Store hazardous materials in areas not susceptible to rain and provide secondary containment in case of leaks or spills. Storage areas should be impervious, covered, bermed, and located away from storm drain inlets.
4. Locate hazardous materials storage and handling areas away from natural watercourses and storm drains.
5. The storage of toxic, corrosive, reactive, or ignitable materials shall comply with local and state fire codes.
6. Paved storage areas shall be maintained in impervious condition. Cracks and gaps will be covered to maintain the integrity of the secondary containment.
7. Store and maintain appropriate spill cleanup materials in a location known to all (near storage and maintenance areas).
8. Incompatible hazardous materials shall be stored at least 20 feet apart and shall be separated by a non-combustible partition.
9. Used lead acid batteries must be stored in accordance with EH&S guidance provided on: [http://blink.ucsd.edu/ehs](http://blink.ucsd.edu/ehs)
**Material Compatibility**
1. Review MSDS for chemical compatibility guidance. In general, corrosive and reactive materials should not be stored with flammable or combustible materials.
2. Ensure each container is compatible with its contents (e.g., store corrosive materials such as acids in plastic containers/drums NOT in metal containers).
3. Mixed materials within a container shall be compatible with each other.
4. Materials stored on the same pallet should be compatible with one another.

**Secondary Containment**
1. Inspect secondary containment systems for cracks, leaks, open drain valves. Drain valves must be kept closed and leaks must be repaired immediately.
2. If rain water accumulates inside secondary containment, inspect water before draining/pumping it out. Rainwater that is contaminated must be pumped into a container, labeled, and disposed of through EH&S.

**Training**
1. Train employees on proper hazardous materials management, including how to obtain information from MSDS.
2. Train employees on proper spill containment and cleanup. Make sure employees know where spill response equipment is located and how to use it.
3. EH&S provides annual training on hazardous materials management (see Training below)

**Mixing**
1. Transfer or mixing of oils, paints, solvents, and other liquid materials shall be performed in areas with secondary containment in place.
2. When mixing paint, open containers must be under observation at all times and never left unattended.
3. Materials must be mixed away from heat, flame, sparks, or other sources of ignition.

**Spill Prevention and Response**
1. Minimize working quantities stored on hand (e.g., use 1 to 5 gallons containers instead of large drums)
2. Store and maintain appropriate spill cleanup materials in a location known to all personnel and near the material use and storage areas.
3. Review BMP A02 – Spill Control and Cleanup for additional guidance

**Frequency & Maintenance:**
1. Regularly inspect containers for leaks, deterioration, and proper labeling, and ensure they are closed and secure. Transfer materials out of any containers that are leaking, corroded, or otherwise deteriorating into safe containers.

**Training:**
Shops, trades, and theater staff that perform outdoor work activities that could contribute pollutants to the campus storm water system must take the “Annual Shop & Studio Environmental Compliance & Hazards Training” which includes storm water pollution prevention and spill prevention, control, and cleanup.

**Additional Information:**
UC San Diego’s Storm Water Management Program: [http://stormwater.ucsd.edu](http://stormwater.ucsd.edu)