ABOVEGROUND STORAGE TANKS (ASTs)

Most ASTs must meet U.S. EPA’s Spill, Prevention, Control, and Countermeasure (SPCC) requirements\(^1\). Because SPCC rules apply to facilities with a single AST with a storage capacity greater than 660 gallons or multiple tanks with a combined capacity greater than 1,320 gallons, UCR must comply with SPCC rules. Individual measures should also be combined in an overall prevention approach for the safety of the water resources and the environment.

Federal AST Requirements

- Standard tank filling practices to prevent spills and overfills must be followed
- Secondary containment area to contain spills and detect leaks; secondary containment must:
  1. Hold 110% of the contents of the largest tank and have freeboard for precipitation
  2. Be impermeable to the materials being stored
  3. Have a sump pump to collect accumulated rain water
  4. Be inspected before being dispensed
- ASTs shall be inspected to ensure they are not leaking
- A newly installed tank system must be audited by a professional engineer to identify and correct problems such as loose fittings, poor welding, and poorly fit gaskets
- An AST that has remained out of service for a year or more must be maintained and checked by the owner, declared inactive, or removed - if declared inactive:
  1. Remove all substances (including pipes) and completely clean the inside
  2. Clearly label tanks with the date and the words “Out of Service”
  3. Samples may be required to determine if any contamination has occurred
  4. Tanks must be inspected and meet leak detection requirements before they are put back in service

Leak Prevention Measures

- Consider the location and distance of the facility in relation to drinking water wells, ditches, storm or sanitary sewers, or other moving waters
- Include corrosion protection
- All underground piping to the tank shall be double-walled or located above ground to facilitate inspection
- Seal the floors, containment area, and sump pump pit with resistant coating
- Clean the containment areas (e.g., sweeping with a broom and using limited absorbent) to prevent unnecessary dirt and contaminant buildup
- To keep out rain, reduce evaporation losses and moisture condensation, paint tanks a reflective color, install them in an east-west direction, install a low-pressure valve on top of the tank, and install a cover over the tank
- Install AST systems that have adequate safeguards against fire, overfills, and damage (caused by vehicles or vandals)

Visit [www.ehs.ucr.edu](http://www.ehs.ucr.edu) for additional information or call EH&S at 827-5528 if you have any questions.

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\(^1\) Title 40 of the Code of Federal Regulations (CFR), Part 112.