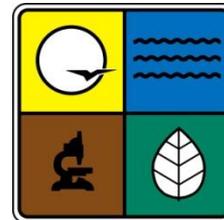


# Closed Containers

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DEPARTMENT OF  
NATURAL RESOURCES

# Purpose of Closed Containers

- Minimize volatile emissions
- Protect ignitable/reactive waste from ignition/reaction
- Reduce potential mixing of incompatibles
- Reduce direct contact with facility personnel

# Current MDNR Guidance

- Based on EPA guidance document dated December 3, 2009
- Information drawn from EPA regions and states
- EPA guidance does NOT supersede or replace any existing state closed container guidance

# Typical HW Containers

- EPA recommends a cover be properly secured
  - Rings are tightly bolted
  - Bungholes are capped
  - Possibly emergency release valves to avoid explosions

# Liquids in Satellite Accumulations

- Closed unless adding or removing waste
- At or near the point of generation
- Under control of the operator
- Container is closed when all openings are properly and securely affixed
- Lids completely covering container
- Release of volatiles is prevented
- Spills are prevented if tipped

# Liquids Continued

- Varied Approaches
  - Special funnels
  - Spring closed lids
  - One way valves
  - Situationally dependent! Contact DNR or EPA
- Whatever the approach, it must prohibit the waste or emissions from exiting the containers

# Continuously Receiving Waste

- Typically Gas Chromatography or High Performance Liquid Chromatography systems
- To prevent malfunctions or excess back pressure on device a vent system may be necessary
- Containers still must be closed to minimize releases
- Can check with DNR for particular situations

# Solid and Semi-solid HW

- The lid must make contact with the rim all the way around
- Containers may continuously or intermittently remain open while process is in operation
- Foot pedal operated containers may be appropriate for wastes that do not contain free liquids

# Other Types of Containers

- Polysacks, boxes, roll-offs, CY boxes, semi-trailers
- Must be sealed to the extent necessary to keep HW and air emissions inside the container
- Dry filters – twist the neck of the bag
- Wet filters – double lined and sealed to prevent emissions

# Other Containers Con't

- Roll-offs (No VOC) – lids shut and have a good seal around the rim
- Roll-offs (VOC) – subject to Subpart CC regulations for vapor issues

## For any Questions

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