Closed Container Guidance Discussion
Hazardous Waste Forum
February 2011

EPA’s Guidance -
http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/AE4702EFE2C2D67A852576D50062AD7C/$file/14810.pdf

Missouri Guidance -
http://www.dnr.mo.gov/env/hwp/enf/Containers.htm
(See especially the February 15, 2006 and September 28, 2006 postings.)

Items to Cover

Background
Existing regulations – allow flexibility in determining if a container is “closed”
Existing guidance – “recommendations, may’s and should’s”
Potential Concerns for Discussion

Background
EPA May 1980 Federal Register Preamble sets standard of keeping containers closed with lids or some other closure device except when adding or removing waste. Purpose of closing containers is to:
- Minimize emissions of volatile wastes
- Help protect ignitable or reactive waste from sources of ignition or reaction
- Help prevent spills
- Reduce the potential for mixing of incompatible wastes and
- Reduce the potential for direct contact of facility personnel with waste

Existing Federal Regulations for 90 Day Storage Containers in Central Accumulation Areas (CAAs)
40 CFR 262.34(a)(1)(i)
- Container condition (265.171)
- Container and waste compatibility (265.172)
- Container closure (265.173)
- Container area inspections (265.174)
- Air emissions (265 Subpart AA, BB, CC)
262.34(a)(2)
- Mark the accumulation date
262.34(a)(3)
- Label with the words “hazardous waste”

Existing Federal Regulations for Satellite Accumulation Areas (SAAs)
40 CFR 262.34(c)(1)(i)
- Container condition (265.171)
-Container and waste compatibility (265.172)
-Container closure (265.173)

262.34(c)(1)(ii)
-Mark the containers as “hazardous waste” or other words that identify the contents

Existing Guidance – Background
- EPA’s Advanced Notice of Proposed Rulemaking of April 22, 2004
- Evaluated EPA’s hazardous waste generator regulatory program
- Commenters selected “closed” containers as needing clarification
- EPA releases Closed Container Guidance on December 3, 2009
- Not a rule and not legally enforceable
- “Does not replace any existing laws or regulations
- “…recommended procedures and approaches to assist EPA and authorized state program implementers, as well as the regulated community, in determining when a container is “closed” for purposes of 40 CFR 264.173(a) and 40 CFR 265.173(a).”
- “…a state’s regulations may be more stringent or broader in scope than the federal regulations. Thus, we encourage generators to check with the appropriate state agency for regulatory requirements.”

Hazardous Waste Container Definition and Management
“…any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.” 40 CFR 260.10
-must always be closed during storage, except when it is necessary to add or remove waste. 40 CFR 265.173(a)

EPA’s Guidance Distinguishes Between:
Less than 90 day storage area
-Where HW containers are kept per generator requirements
-Closed when not adding or removing waste
-Recommend secure closure to prevent spills or releases
Satellite accumulation area (SAA)
-Location within the facility where initial generation occurs & where HW is accumulated in container
-Close container unless adding or removing waste
-Up to 55 gallons may be accumulated in SAA

Liquid in SAAs
Poses:
-inhalation risks
-potential vapors buildup
-accidental spill risks
-Both EPA and MO guidance note – Liquid containing SAA container closed when all openings or lids properly and securely affixed to the container, except when wastes are actually being added to or removed from the container.
Closure intended to prevent release of volatile emissions and to prevent a spill if the container is tipped over.

Practical Problems of Closure in SAAs
- May not be practical to secure the cover using snap rings, cap bungholes securely or fasten the container with other types of covers or lids during working hours.
- EPA considers closed head or closed top drums (i.e., w/2 bungholes and non-removable lids) closed if using special funnels with manually or spring closed lids or other closure devices. Funnels screwed tightly into the bunghole and fitted with a gasket, if necessary, to seal the funnel lid firmly closed. This keeps the lid in a closed position. All other openings on the drum lid should generally be properly closed or capped. Another alternative is the use of a funnel with a one-way valve that allows hazardous waste to enter the container, but prohibits the waste or emissions from exiting the container.

Page 8 of guidance and Figure 4 – “Liquid hazardous waste also can be accumulated in open-head drums or open-top container (e.g., where the entire lid is removable and typically secured with a ring and bolts or a snap ring) and meet the definition of “closed,” provided the rings are clamped or bolted to the container. In some situations, the container could be considered closed if the lid covers the container top securely even though the rings are not clamped or bolted. Several states take this approach, and EPA believes it reflects a reasonable interpretation of the regulations.”

Recommendations for Preventing Spills
- “Closed containers prevent spills from occurring.”
- For containers without lids securely affixed (e.g., with a bolted ring clamp or locked funnel lid), secure to a wall or building support with a chain or strap (e.g., compressed gas containers).
- Where there is no building support available, strap together to prevent overturning.
- For containers continuously receiving liquid wastes from a process or instrument must be closed, monitor operation to observe releases, secondary containment such as a pan or securing the containers to prevent overturning and while not in operation, close the accumulation container.
- Locate in areas with little or no vehicular traffic, such as forklifts.
- Use secondary containment.
- Use valve vents or level indicators to prevent unnecessary pressure buildup after the addition of liquids to drums.

Solid and Semi-Solid Hazardous Waste (e.g., dewatered metal-bearing wastes or sludges)
- Closed as long as there is complete contact between the lid and the rim all around the top of the container. “This ensures any vapors released to the environment are minimized.” Example: Containers with covers opened by a foot pedal with flip top or spring-loaded lid. Would this preclude a piece of paneling or tarp on a
55-gallon drum? EPA notes seals can erode because of time and use. What if no seals are present?
-Step cans are appropriate for rags, batteries, aerosol cans or solvent-contaminated wipes that do not contain free liquids. What if free liquids are found in container?
-Containers continuously or intermittently receiving HW such as under a bag-house or filter press that generate the waste. Should be capable of catching and retaining all of the material during transfer from a device to the container.

Varied Types of Containers Create Challenges – step cans; bags; polysacks; 20 cubic yard roll-off boxes or containers; one cubic yard heavy-duty card boxes with a plastic liner (Gaylord boxes); semi-trailers that may hold solid and semi-solid hazardous waste; stainless steel and plastic totes in wire cages for liquid hazardous wastes, etc.

Large Rolloffs
-closed when sealed to the extent necessary to keep HW and associated air emissions inside the container
-when waste not being added, container is closed when lids are shut and have a good seal around the rim
-if tarp used on rolloff-keep closed when not receiving waste so precipitation will not enter the container.

Potential Concerns for Discussion
-determining roll-off compliance. Is the roll-off in “light material service” and if not, is tarping compliant?
-containers intermittently receiving hazardous waste
 -When can they be open (facility operation types and containers can help with the answer)
-Weekly inspection interference (40 CFR 265.174)
 -Need to look at condition of containers and containment system—possible if containers are strapped together or to wall?
-The working hours question—when is facility closed or operational?
-Guidance vs. Enforcement Discretion