

2. Treatment Standards for D008 Radioactive Lead Tanks and Containers

The land disposal restrictions (LDR) of 40 CFR Part 268 require that certain wastes meet treatment standards before land disposal. Treatment standards are either concentration-based or technology-based. A waste with a concentration-based standard may be treated to meet LDR using any method of effective treatment (except impermissible dilution), while a technology-based standard requires treatment by the specified technology. D008 radioactive lead solids (e.g., all forms of lead shielding, lead "pigs" and other elemental forms of lead) must be treated by the specific treatment standard of macroencapsulation (MACRO) (55 FR 22628; June 1, 1990). The MACRO treatment method requires application of surface coatings or jacketing of wastes to reduce surface exposure to leaching media. Macroencapsulation specifically may not be used on "any material that would be classified as a tank or container" (268.42, Table 1). What is the LDR treatment standard for D008 radioactive lead solids that happen to be tanks or containers?

D008 radioactive lead solids that are tanks or containers must be treated using the MACRO treatment technology. The macroencapsulation treatment standard requires that the encapsulating material completely surround the waste and be unbroken (57 FR 37235; August 18, 1992). Placement of waste in a container or tank, however, is not considered macroencapsulation for purposes of compliance with LDR (268.42, Table 1). This provision is not intended to preclude macroencapsulation of hazardous tanks and containers, but rather to prevent an owner/operator from merely placing waste in a tank or container in order to meet the standard. Although D008 radioactive lead solids must meet the macroencapsulation treatment standard, an owner/operator may use an alternative treatment method for compliance with LDR if it is shown that the method is equivalent in performance to the specified method (268.42(b)).