**Section 728.149 Alternative LDR Treatment Standards for Contaminated Soil**

a) Applicability. An owner or operator must comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste or which exhibited a characteristic of hazardous waste at the time it was generated into a land disposal unit. The following chart describes whether an owner or operator must comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

|  |  |  |  |
| --- | --- | --- | --- |
| If the LDRs | And if the LDRs | And if | Then the owner or operator |
| Applied to the listed waste when it contaminated the soil\*. | Apply to the listed waste now. | – | Must comply with LDRs. |
| Did not apply to the listed waste when it contaminated the soil\*. | Apply to the listed waste now. | The soil is determined to contain the listed waste when the soil is first generated. | Must comply with LDRs. |
| Did not apply to the listed waste when it contaminated the soil\*. | Apply to the listed waste now. | The soil is determined not to contain the listed waste when the soil is first generated. | Needs not comply with LDRs. |
| Did not apply to the listed waste when it contaminated the soil\*. | Do not apply to the listed waste now. | – | Needs not comply with LDRs. |

\* For dates of LDR applicability, see Appendix G. To determine the date any given listed hazardous waste contaminated any given volume of soil, use the last date any given listed hazardous waste was placed into any given land disposal unit or, in the case of an accidental spill, the date of the spill.

b) Prior to land disposal, contaminated soil identified by subsection (a) as needing to comply with LDRs must be treated according to the applicable treatment standards specified in subsection (c) or according to the universal treatment standards specified in Section 728.148 and Table U applicable to the contaminating listed hazardous waste or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in subsection (c) and the universal treatment standards may be modified through a treatment variance approved in accordance with Section 728.144.

c) Treatment Standards for Contaminated Soils. Prior to land disposal, contaminated soil identified by subsection (a) as needing to comply with LDRs must be treated according to all the standards specified in this subsection (c) or according to the universal treatment standards specified in Section 728.148 and Table U.

1) All Soils. Prior to land disposal, all constituents subject to treatment must be treated as follows:

A) For non-metals except carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in total constituent concentrations, except as provided by subsection (c)(1)(C).

B) For metals and carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by subsection (c)(1)(C).

C) When treatment of any constituent subject to treatment to a 90 percent reduction standard would result in a concentration less than 10 times the universal treatment standard for that constituent, treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required. The universal treatment standards are identified in Table U.

2) Soils That Exhibit the Characteristic of Ignitability, Corrosivity or Reactivity. In addition to the treatment required by subsection (c)(1), prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity, or reactivity must be treated to eliminate these characteristics.

3) Soils That Contain Nonanalyzable Constituents. In addition to the treatment requirements of subsections (c)(1) and (c)(2), prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

A) For soil that contains only analyzable and nonanalyzable organic constituents, treatment of the analyzable organic constituents to the levels specified in subsections (c)(1) and (c)(2); or

B) For soil that contains only nonanalyzable constituents, treatment by the methods specified in Section 728.142 for the waste contained in the soil.

d) Constituents Subject to Treatment. When applying the soil treatment standards in subsection (c), constituents subject to treatment are any constituents listed in Table U, entitled "Universal Treatment Standards", that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not constituents subject to treatment in any given volume of soil that exhibits the toxicity characteristic solely because of the presence of metals.

e) Management of Treatment Residuals. Treatment residuals from treating contaminated soil identified by subsection (a) as needing to comply with LDRs must be managed as follows:

1) Soil residuals are subject to the treatment standards of this Section;

2) Non-soil residuals are subject to the following requirements:

A) For soils contaminated by listed hazardous waste, the RCRA Subtitle C standards applicable to the listed hazardous waste; and

B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)