

**§ 503.14**

(3) If bulk sewage sludge is applied to a lawn or a home garden, the concentration of each pollutant in the sewage sludge shall not exceed the concentration for the pollutant in Table 3 of § 503.13.

(4) If sewage sludge is sold or given away in a bag or other container for application to the land, either:

(i) The concentration of each pollutant in the sewage sludge shall not exceed the concentration for the pollutant in Table 3 of § 503.13; or

(ii) The product of the concentration of each pollutant in the sewage sludge and the annual whole sludge application rate for the sewage sludge shall not cause the annual pollutant loading rate for the pollutant in Table 4 of § 503.13 to be exceeded. The procedure used to determine the annual whole sludge application rate is presented in appendix A of this part.

(b) *Pollutant concentrations and loading rates—sewage sludge.*—(1) *Ceiling concentrations.*

**TABLE 1 OF § 503.13—CEILING CONCENTRATIONS**

Pollutant	Ceiling concentration (milligrams per kilogram) <sup>1</sup>
Arsenic .....	75
Cadmium .....	85
Copper .....	4300
Lead .....	840
Mercury .....	57
Molybdenum .....	75
Nickel .....	420
Selenium .....	100
Zinc .....	7500

<sup>1</sup> Dry weight basis.

(2) *Cumulative pollutant loading rates.*

**TABLE 2 OF § 503.13—CUMULATIVE POLLUTANT LOADING RATES**

Pollutant	Cumulative pollutant loading rate (kilograms per hectare)
Arsenic .....	41
Cadmium .....	39
Copper .....	1500
Lead .....	300
Mercury .....	17
Nickel .....	420
Selenium .....	100
Zinc .....	2800

(3) *Pollutant concentrations.*

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**TABLE 3 OF § 503.13—POLLUTANT CONCENTRATIONS**

Pollutant	Monthly average concentration (milligrams per kilogram) <sup>1</sup>
Arsenic .....	41
Cadmium .....	39
Copper .....	1500
Lead .....	300
Mercury .....	17
Nickel .....	420
Selenium .....	100
Zinc .....	2800

<sup>1</sup> Dry weight basis.

(4) *Annual pollutant loading rates.*

**TABLE 4 OF § 503.13—ANNUAL POLLUTANT LOADING RATES**

Pollutant	Annual pollutant loading rate (kilograms per hectare per 365 day period)
Arsenic .....	2.0
Cadmium .....	1.9
Copper .....	75
Lead .....	15
Mercury .....	0.85
Nickel .....	21
Selenium .....	5.0
Zinc .....	140

(c) *Domestic septage.* The annual application rate for domestic septage applied to agricultural land, forest, or a reclamation site shall not exceed the annual application rate calculated using equation (1).

$$AAR = \frac{N}{0.0026} \quad \text{Eq. (1)}$$

Where:

AAR=Annual application rate in gallons per acre per 365 day period.

N=Amount of nitrogen in pounds per acre per 365 day period needed by the crop or vegetation grown on the land.

[58 FR 9387, Feb. 19, 1993, as amended at 58 FR 9099, Feb. 25, 1994; 60 FR 54769, Oct. 25, 1995]

**§ 503.14 Management practices.**

(a) Bulk sewage sludge shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat.

## Environmental Protection Agency

## § 503.16

(b) Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to section 402 or 404 of the CWA.

(c) Bulk sewage sludge shall not be applied to agricultural land, forest, or a reclamation site that is 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority.

(d) Bulk sewage sludge shall be applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that is equal to or less than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority.

(e) Either a label shall be affixed to the bag or other container in which sewage sludge that is sold or given away for application to the land, or an information sheet shall be provided to the person who receives sewage sludge sold or given away in an other container for application to the land. The label or information sheet shall contain the following information:

(1) The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

(2) A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

(3) The annual whole sludge application rate for the sewage sludge that does not cause any of the annual pollutant loading rates in Table 4 of § 503.13 to be exceeded.

### § 503.15 Operational standards—pathogens and vector attraction reduction.

(a) *Pathogens—sewage sludge.* (1) The Class A pathogen requirements in § 503.32(a) or the Class B pathogen requirements and site restrictions in

§ 503.32(b) shall be met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

(2) The Class A pathogen requirements in § 503.32(a) shall be met when bulk sewage sludge is applied to a lawn or a home garden.

(3) The Class A pathogen requirements in § 503.32(a) shall be met when sewage sludge is sold or given away in a bag or other container for application to the land.

(b) *Pathogens—domestic septage.* The requirements in either § 503.32 (c)(1) or (c)(2) shall be met when domestic septage is applied to agricultural land, forest, or a reclamation site.

(c) *Vector attraction reduction—sewage sludge.* (1) One of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(10) shall be met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

(2) One of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) shall be met when bulk sewage sludge is applied to a lawn or a home garden.

(3) One of the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(8) shall be met when sewage sludge is sold or given away in a bag or other container for application to the land.

(d) *Vector attraction reduction—domestic septage.* The vector attraction reduction requirements in § 503.33(b)(9), (b)(10), or (b)(12) shall be met when domestic septage is applied to agricultural land, forest, or a reclamation site.

### § 503.16 Frequency of monitoring.

(a) *Sewage sludge.* (1) The frequency of monitoring for the pollutants listed in Table 1, Table 2, Table 3 and Table 4 of § 503.13; the pathogen density requirements in § 503.32(a) and § 503.32(b)(2); and the vector attraction reduction requirements in § 503.33 (b)(1) through (b)(4) and § 503.33 (b)(7) through (b)(8) shall be the frequency in Table 1 of § 503.16.