

**WAC 173-308-180 Vector attraction reduction.** When vector attraction reduction is accomplished prior to application of biosolids to the land, the requirements in one of subsections (1) through (6) of this section must be met.

The vector attraction reduction requirements in subsection (1), (2), or (3) of this section must be met at the same time or after the Class A pathogen requirements in WAC 173-308-170.

(1) **Alternative 1: Volatile Solids Reduction.** The mass of volatile solids in the biosolids must be reduced by a minimum of thirty-eight percent.

(a) **Bench-scale test for anaerobically digested solids.** When the thirty-eight percent volatile solids reduction requirement in this subsection cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for forty additional days at a temperature between 30 and 37°C (86 and 98.6°F). After the forty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than seventeen percent.

(b) **Bench-scale test for aerobically digested solids.** When the thirty-eight percent volatile solids reduction requirement in this subsection cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for thirty additional days at 20°C (68°F). After the thirty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than fifteen percent.

(2) **Alternative 2: Specific Oxygen Uptake Rate (SOUR).** The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be less than or equal to 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20°C (68°F).

(3) **Alternative 3: Aerobic Process.** The biosolids must be treated in an aerobic process for fourteen days or longer. During that time, the temperature of the biosolids must be higher than 40°C (104°F) and the average temperature of the biosolids must be higher than 45°C (113°F).

(4) **Alternative 4: pH Adjustment.** The pH of the biosolids must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for two hours and then at 11.5 or higher for an additional twenty-two hours.

(5) **Alternative 5: Percent Solids for Stabilized Solids.** For biosolids that do not contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than seventy-five percent based on the moisture content and total solids prior to mixing with other materials.

(6) **Alternative 6: Percent Solids for Unstabilized Solids.** For biosolids that contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than ninety percent based on the moisture content and total solids prior to mixing with other materials.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. WSR 07-12-010 (Order 06-06), § 173-308-180, filed 5/24/07, effective 6/24/07. Statu-

tory Authority: RCW 70.95J.020 and 70.95.255. WSR 98-05-101 (Order 97-30), § 173-308-180, filed 2/18/98, effective 3/21/98.]