

3-C-2-b
1/25/00

Bio-Solids Land Application

- (1) For review and fee purposes, a proposal to apply Bio-Solids shall be considered a site plan subject to administrative approval by the Zoning Administrator.
- (2) The following information shall be submitted to the Zoning Administrator when seeking administrative site plan approval for Bio-Solids Land Application:
 - (a) The name, telephone number, and address of the applicant;
 - (b) A brief description of the applicant's business;
 - (c) Tax map parcel number and the number of acres of the property on which the Bio-Solids are to be applied;
 - (d) Complete copies of application and other related materials required by the state permitting authority to be submitted to the County at the time of state submission;
 - (e) A statement signed by the property owner(s) authorizing representatives of Clarke County access anywhere on the owner's land for the purpose of inspecting the Land Application process and the right to sample Bio-Solids when desired;
 - (f) Proof of liability insurance in the aggregate amount of \$1,000,000.00;
 - (g) A Nutrient Management Plan for the subject property prepared by an individual certified by the Commonwealth of Virginia as a Certified Nutrient Management Planner, who meets the standards and criteria contained in the Virginia Nutrient Management Training & Certification Regulations. Plans must be no more than three years old.
 - (h) The source of the biosolids, including the name, address, and telephone number with a contact person of the source, within 48 hours of application.
- (3) Bio-Solids Land Application shall be conducted in accord with the following standards:
 - (a) Bio-solids shall not be applied in areas with a slope exceeding 15% or where bedrock is shallow or the water table is high.
 - 1) Depth to Bedrock: Biosolids may not be applied to soil types with a depth to bedrock of less than 30 inches as identified in Table 16 of the Soil Survey of Clarke County, Virginia (USDA, 1982). These include the following soil types: 1B, 1C, 5B, 5C, 7D, 8D, 9D, 12D, 12E, 13D, 13E, 14C, 15B, 15C, 17B, 28B, 28C, 29C, 32B, 58D.
 - 2) Depth to High Water Table: Biosolids may not be applied to soil types with a depth to high water table of less than 30 inches as identified in Table 16 of the Soil Survey of Clarke County, Virginia (USDA, 1982). These include

the following soil types: 1B, 1C, 24, 25B, 26B, 26C, 27B, 30B, 56.

3) If an applicator believes the Soil Survey is inaccurate, the applicator shall demonstrate to the Zoning Administrator that a minimum depth of 30 inches to bedrock or ground water exists. Demonstrating adequate depth shall be determined by auger borings. Auger borings shall be collected in the following manner:

a) To determine depth of bedrock, there shall be at least one boring for each soil type in question with a minimum of one boring per 10,000 square feet.

b) To determine depth to high water table there shall be at least one boring for each soil type in question with a minimum of one boring per 10,000 square feet. Borings shall be placed in the lowest areas of the soil type. Borings shall be exactly 30 inches deep. Groundwater may be assumed to be within two feet of the soil surface if any water appears in the bottom of the hole after 30 minutes (one hour if the soil is "heavy textured", i.e., high in clay content).

(b) Bio-Solids shall not be applied within the EPA designated Sole Source Aquifer of Prospect Hill Spring. This encompasses the surface water drainage area of Page Brook, and the Natural Resource Overlay District.

(c) In addition to the setback requirements established by the Virginia Department of Health, as listed in items one through six below, the additional setbacks, listed in items seven through seventeen below, shall be complied with:

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| 1) occupied dwellings | 200 feet |
| (unless waived in writing by the owner and occupant of the dwelling) | |
| 2) property line | 100 feet |
| (unless waived in writing by the owner of the adjacent property) | |
| 3) public rights of way | 10 feet |
| 4) rock outcrop | 25 feet |
| 5) agricultural drainage ditches with slopes < 2% | 10 feet |
| 6) private wells | 100 feet |
| 7) Intermittent Streams or drainage swales | 50 feet |
| 8) Perennial Stream | 100 feet |
| 9) Parcels containing public water sources (including wells, springs, or surface water intakes) | 1000 feet |

- 10) Shenandoah River 100 year flood plain
- 11) Sinkholes 100 feet
(sinkholes as defined in the Clarke Co. Soil Survey)
- 12) Springs-perennial
 - above spring 500 feet
 - below spring 200 feet
- 13) incorporated town limits 1000 feet
- 14) the Berryville Annexation Area 1000 feet
- 15) residential zoning districts 1000 feet
- 16) parcels containing public or private schools, authorized by the Commonwealth of Virginia, providing instruction at any grade(s) from K through 12, with at least 50 students 1000 feet
- 17) Other human created, animal created, or natural features that could allow bio-solids to migrate to surface water or ground water to be identified by the applicator and the Zoning Administrator (including but not limited to perc. holes, old foundations, pulled up trees, animal holes on slopes, etc.) 100 feet

- (d) Land proposed for Bio-Solids Land Application shall be inspected before and during the application of Bio-Solids by a permanent committee. The committee shall consist of the Zoning Administrator, the County Natural Resources Planner, the local Extension Agent, the local Soil Conservationist, one person from the Planning Commission's Agriculture Committee, and two persons appointed by the Board of Supervisors.
- (e) The requirements of the Stream Protection Overlay District that pertain to retention of existing vegetation shall also apply to setback areas adjacent to perennial springs and sinkholes.
- (f) The property proposed for bio-solids application is in the Clarke County Agricultural District or the owner of said property has requested, in writing, the inclusion of the property in the Clarke County Agricultural District;
- (g) The bio-solids applicator shall notify the Clarke County Zoning Administrator in writing of its intent to begin land application on an approved site at least 48 hours before such application. The notice shall include:
 1. a field map of the lands to which the biosolids will be applied;
 2. how long the process is estimated to continue, and
 3. when the application will terminate.

If circumstances cause the commencement of land application to take place more than five days after the date

indicated, the Zoning administrator shall be so notified promptly in writing.

- (h) The Zoning Administrator reserves the right to conduct random sampling of biosolids material. Bio-solid sample analysis shall include as a minimum: percent solids, pH, the dry weight concentration of total Kjeldahl nitrogen, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, cadmium, copper, mercury, nickel, lead, and zinc. The Zoning Administrator may require analysis of other bio-solids constituents if necessary to adequately assess the potential public health and environmental impacts of the application. The samples shall be collected by a County representative and analyzed by a State Certified Testing Laboratory at the expense of the applicator.

(4) Suspension of Applicator Operation

- (a) If the Zoning Administrator determines that a bio-solids applicator has not complied with the provisions of Federal, State, or local regulations or ordinances, the Zoning Administrator shall issue the applicator a Notice of Suspension from continued operation within Clarke County for a six-month period. This Notice shall be sent by certified mail to the last known address of the applicator. Following the expiration of the suspension, the applicator shall meet with the Zoning Administrator and review the improvements to their operations. If the Administrator concludes that the applicator will operate in a manner consistent with all regulations or ordinances, the Administrator shall issue the applicator a Notice of Resumption of their operations within Clarke County. Any subsequent suspension of the same applicator shall be for a period of time set by the Board of Septic and Well Appeals.
- (b) An applicator may appeal a Notice of Suspension to the Clarke County Board of Septic & Well Appeals. Such appeal shall be filed with the clerk of the board in writing within 30-days of the action of the Zoning Administrator. The appeal shall include scientific data demonstrating the applicator's compliance with all regulatory requirements. An owner of property adjacent to a bio-solids application site may appeal a Notice of Resumption to the Board of Septic & Well Appeals. Such appeal shall be filed with the clerk of the board in writing with 30-days of the action of the Zoning Administrator. The appeal shall cite reasons why the subject applicator should not be allowed to resume bio-solids applications.