

**TITLE 33**  
**LEGISLATIVE RULE**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**DIVISION OF WASTE MANAGEMENT**

**SERIES 3**  
**YARD WASTE COMPOSTING RULE**

**33-3-1. General.**

1.1. Scope. -- This legislative rule establishes requirements for the proper handling and composting of yard waste including siting, bonding, design, construction, modification, operation, closure and permitting procedures pertaining to any facility or activity that generates, processes, composts or otherwise reuses or recycles yard waste by whatever means and sets forth requirements for operator training and certification.

1.2. Authority. -- W. Va. Code '20-11-8(c).

1.3. Filing Date. -- June 26, 2001.

1.4. Effective Date. -- June 26, 2001.

1.5. Legislative Mandate.

Effective January 1, 1997 it is unlawful to deposit yard waste, including grass clippings and leaves, in a solid waste facility in West Virginia: Provided, That such prohibitions do not apply to a facility designed specifically to compost yard waste or otherwise recycle or reuse such items: Provided, That reasonable and necessary exceptions to such prohibitions are included in subsection 3.1.c of this rule.

1.6. Incorporation by Reference.

Whenever federal or state statutes or rules are incorporated into this rule by reference, the reference is to the statute or rule in effect on the effective date of this rule.

**33-3-2. Definitions.**

All definitions in W. Va. Code '22-15-2 and all definitions in '33CSR1 and '33CSR2 are fully incorporated into this rule by reference. The following additional definitions apply to this rule:

2.1. "Buffer Zone" means the distance between the composting operation and the adjacent property boundaries.

2.2. "Commercial Yard Waste Composting Facility" means any solid waste facility which is authorized to handle or accept up to thirty-six thousand (36,000) tons per year of yard waste and/or other compostable solid waste materials generated by sources other than the owner or operator of the facility, provided that, a commercial yard waste composting facility does not include an approved solid waste facility owned and operated by a person for the sole purpose of composting yard waste created by that person or other persons on a cost-sharing or nonprofit basis and shall not include land upon which finished compost is applied for use as a soil amendment/soil conditioner.

2.3. "Domestic yard waste" means yard wastes generated in small quantities by the resident or tenant of

residential property.

2.4. "Non-residential composting activities" means a composting activity by persons such as landscape contractors, nurseries or greenhouses, lawn and garden companies, solid waste authorities and municipalities which are authorized to compost up to twelve thousand (12,000) tons per year of yard waste materials consisting of grass clippings, weeds, leaves, brush/shrub or tree prunings and other acceptable compostable materials which have been approved in writing by the Chief to produce a safe product for use as a soil amendment/soil conditioner.

2.5. "Nuisance" means any practice or condition created by a composting facility or activities which results in dust, dirt, mud, infectious molds, bacteria or fungi, or offensive odor, or attracts vectors such as insects, rodents, snakes or in any way interferes with the normal use of any properties or causes harm or injury to any person or the environment.

2.6. "Runoff" means any flowing water and associated contaminants originating from any part of the solid waste facility or activity that drains over the land.

2.7. "Run-on" means any rainwater, snow melt, wastewater, leachate or other liquid that drains over land onto any part of the compost facility.

2.8. "Soil amendment/soil conditioner" means an organic matter source or yard waste compost that when added to the soil improves the general physical, chemical and biological properties of the soil.

2.9. "Yard waste composting" means the controlled decomposition of yard waste to produce a stable and beneficial humus-like material.

2.10. "Yard waste" means grass clippings, weeds, leaves, brush, garden waste, shrub or tree prunings and other living or dead plant tissues, except that, such materials which, due to inadvertent contamination or mixture with other substances which render the waste unsuitable for composting, shall not be considered to be yard waste: Provided, That the same or similar waste generated by commercial agricultural enterprises is excluded.

2.11. "Windrow" means an elongated pile created by the placement of yard waste.

### **33-3-3. Yard Waste Composting and Permitting Requirements.**

#### **3.1. Applicability.**

3.1.a. This rule applies to all persons who handle or manage yard waste to produce compost and requires that:

3.1.a.1. Methods employed for yard waste composting must be consistent with section 4 of the Solid Waste Management Board's program for the **Proper Handling of Yard Waste**, dated May 1, 1993.

3.1.a.2. Yard wastes must not be combined with **sludge**, as defined in 33CSR1 section 2 of the Solid Waste Management Rule, **petroleum contaminated soil** or other solid waste materials specified by the Secretary.

3.1.a.3. A yard waste composting facility may not be situated atop a partially or fully closed solid waste disposal area, unless approved by the Secretary in writing; An existing solid waste facility by minor

permit modification may include yard waste composting operations.

3.1.b. Domestic Yard waste shall be disposed of in a manner consistent with one or any combination of the following options as provided for in W.Va. Code '20-11-8:

3.1.b.1. Disposal in a publicly or privately operated commercial or noncommercial composting facility or activity;

3.1.b.2. Disposal by composting on the property from which domestic yard waste is generated or on adjoining property or neighborhood property if consent is obtained from the owner of the adjoining or neighborhood property;

3.1.b.3. Disposal by open burning where such activity is not prohibited by the W. Va. Code, rules promulgated thereunder or municipal or county codes or ordinances.

3.1.c. Reasonable and Necessary Exceptions to Prohibition. Solid waste landfills may accept and dispose of domestic yard waste delivered to the facility by a municipality, solid waste hauler, resident or tenant when the Secretary determines that none of the options contained in subdivision 3.1.b are available.

### 3.2. Location Standards for Siting a Commercial Yard Waste Composting Facility.

3.2.a. The following location standards apply to commercial yard waste composting facilities, unless otherwise approved by the Secretary:

3.2.a.1. A yard waste composting facility shall be located in an area which has been authorized for composting facilities by the county and/or regional solid waste authority approved siting plan;

3.2.a.2. Yard waste composting facilities shall not be sited or constructed in areas subject to a one hundred year flood plain and no facility shall be closer than three hundred (300) feet to any regularly flowing stream, perennial stream, pond, lake, wetland or spring;

3.2.a.3. Yard waste composting facilities shall not be located in areas which are geologically unstable or where the site topography exceeds six (6) percent grade;

3.2.a.4. Acceptable sites must have sufficient area and terrain to allow for proper management of run-on, runoff and leachate;

3.2.a.5. A yard waste composting facility shall not be located within two thousand (2,000) feet of any health care facility, school, church, or similar type of institution. The Secretary may reduce this setback distance if the owner or operator can successfully demonstrate that a nuisance will not be created due to the operation of the facility;

3.2.a.6. A yard waste composting facility shall not be located within two hundred (200) feet of drinking water supply wells and occupied dwellings;

3.2.a.7. A yard waste composting facility shall not be located within fifty (50) feet of a federal or state highway right-of-way or within twenty-five (25) feet of a city street right-of-way;

3.2.a.8. The operational area of a yard waste composting facility shall not be located within one hundred (100) feet of an adjacent property owner's boundary line;

3.2.a.9. A yard waste composting facility shall not be located on land where runoff drains into a sinkhole;

3.2.a.10. A yard waste composting facility shall not be located on land that has a seasonal high groundwater table (based on soil maps) less than two (2) feet from the land surface;

3.2.a.11. A yard waste composting facility shall not be located on land that has less than twenty (20) inches of soil over bedrock or on an impervious pan; and

3.2.a.12. A yard waste composting facility shall not be located within ten thousand (10,000) feet to the closest point of any airport runway used or planned to be used by turbojet aircraft or within five thousand (5,000) feet to the closest point of any airport runway used only by piston type aircraft or within other areas where a substantial bird hazard to aircraft would be created.

### 3.3. Location Standards for Siting Non-Residential Composting Activities.

3.3.a. The following location standards apply to non-residential composting activities:

3.3.a.1. Non-residential composting activities shall not be sited or constructed in areas closer than one hundred (100) feet to any regularly flowing stream, perennial stream, pond, lake, wetland or spring;

3.3.a.2. Non-residential composting activities shall have sufficient area and terrain to allow for the proper management of run-on, runoff and leachate;

3.3.a.3. Non-residential composting activities shall not be located within one hundred (100) feet of an adjacent property owner's boundary line without obtaining prior written permission from the adjacent property owner;

3.3.a.4. Non-residential composting activities shall not be located within one hundred (100) feet of a sinkhole; and

3.3.a.5. Non-residential composting activities shall not exceed five (5) acres in size without written approval from the Secretary.

3.3.b. Compliance with any of the location standards for yard waste composting facilities or activities in this rule does not relieve the owner or operator from compliance with all other codes, ordinances or rules.

### 3.4. Design and Construction of Commercial Yard Waste Composting Facility.

3.4.a. A handling area and proper equipment shall be provided to segregate waste other than yard waste and non-compostable components in the yard waste and to store such components in properly constructed containers prior to their disposal at a permitted solid waste disposal facility.

3.4.b. If the yard waste composting facility is located in any area where the seasonal high water table (based on soil maps) lies within five (5) feet of the ground surface, the composting and handling areas shall be hard-surfaced in a manner acceptable to the Secretary and diked to prevent entry of run-on or escape of runoff and other liquids, and a sump with an adequately sized pump located at the low point of the hard-surface area shall be provided to convey liquids to a wastewater treatment, disposal or holding facility.

3.4.c. Accepted engineering practices shall be incorporated into the design of facilities located on

sites with:

- 3.4.c.1. Springs, seeps, and other groundwater intrusions;
- 3.4.c.2. Gas, water, phone, sewage lines or other utilities under the active areas; or
- 3.4.c.3. Electrical transmission lines above or below the active areas; and
- 3.4.c.4. Additional design and construction considerations.

3.4.c.4.A. Areas used for mixing, curing, and storing of compost shall be graded to prevent run-on, collect runoff, and provided with a drainage system to route the collected runoff to a wastewater storage, treatment, or disposal facility.

3.4.c.4.B. A buffer zone with the minimum width of one hundred (100) feet shall be incorporated in the facility design between facility adjacent property boundaries and the operational areas of the facility.

3.4.c.4.C. Roads serving the unloading, handling, composting, and storage areas shall be of all-weather construction and the design features for each shall be shown on drawings submitted to the Department of Environmental Protection in the application.

3.4.c.4.D. The design of a commercial yard waste composting facility shall be signed and sealed by a W. Va. registered professional engineer.

### 3.5. Permits Required.

#### 3.5.a. Applicability.

No person may establish, install, construct or operate the following:

3.5.a.1. A commercial yard waste composting facility without obtaining a solid waste facility permit from the Department of Environmental Protection, provided that first, the applicant fulfills the pre-siting requirements of subsection 3.4 of the West Virginia Solid Waste Management Rule, 33CSR1; or

3.5.a.2. A non-residential composting activity without the property owner/operator obtaining a registration number from the Department of Environmental Protection, Division of Waste Management, Solid Waste Management Section.

#### 3.5.b. Exemptions.

Residential and non-residential composting activities are exempt from obtaining a commercial solid waste facility permit. However, the non-residential activity shall be located and operated in compliance with the location standards and the operational requirements as set forth in subsections 3.3 and 3.8 of this rule.

### 3.6. Permit Application Requirements.

3.6.a. The applicant for a permit to establish, install, construct, operate and close a commercial yard waste composting facility shall include in the permit application the following:

- 3.6.a.1. A copy of the Certificate of Convenience and Necessity (CON) obtained from the WV

Public Service Commission;

- 3.6.a.2. A copy of the Certificate of Siting Approval;
  - 3.6.a.3. The name, address, and location of the proposed facility;
  - 3.6.a.4. The proposed operator's and owner's name, address, telephone number, ownership status, and status as a federal, state, private, public or other entity;
  - 3.6.a.5. A copy of legal documents demonstrating that the applicant has legal right to enter and conduct commercial yard waste composting operations on the property including a copy of the deed description or lease agreement;
  - 3.6.a.6. A safety program designed to prevent hazards and accidents at the proposed facility;
  - 3.6.a.7. Proof of liability insurance to cover the operations of the proposed facility; and
  - 3.6.a.8. A detailed description of the activities to be conducted by the applicant at the facility.
- 3.6.b. An engineering report for an application to obtain a permit to construct shall contain, at a minimum, the following:
- 3.6.b.1. A regional map, or maps, (of appropriate scale) that delineate the entire service area of the proposed facility (both existing and proposed); existing and proposed collection, processing, and disposal operations; the location of the closest population centers; and the transportation systems including highways, airports, railways and waterways;
  - 3.6.b.2. A vicinity map (minimum scale of 1"=2000') that delineates the area within one mile of the facility boundaries, zoning and land uses, residences, surface waters, access roads, bridges, railroads, airports, historic sites, and other existing and proposed manmade or natural features relating to the project;
  - 3.6.b.3. A site plan (minimum scale of 1"=200') with five foot contour intervals that delineates property boundaries, the location of existing and proposed soil boring, monitoring wells, buildings and appurtenances, fences, gates, roads, parking areas, drainage, culverts, storage facilities or areas, loading areas; existing and proposed elevation contours and direction of prevailing winds; and the location of residences, potable wells, surface water bodies, wetlands, and drainage swales located within the site and in the site plan area;
  - 3.6.b.4. A detailed description of the operation of the facility including precautions or procedures for operation during heavy winds, thunderstorms, snowstorms, prolonged freezing conditions and an operational narrative describing the following:
    - 3.6.b.4.A. Collection methods to be employed;
    - 3.6.b.4.B. Methods to be utilized in constructing compost piles or windrows, including equipment;
    - 3.6.b.4.C. Proposed dimensions of compost piles or windrow;
    - 3.6.b.4.D. A source of supplemental water to maintain an optimal moisture content of compost piles or windrows;

3.6.b.4.E. Proposed turning frequency, including the method for determining that frequency;

3.6.b.4.F. Proposed duration of the composting process, including curing or storage time, and the term of compost distribution;

3.6.b.4.G. A distribution plan for the yard waste compost;

3.6.b.4.H. A residue disposal plan including the location of disposal site(s);

3.6.b.4.I. Provisions for emergency response; and

3.6.b.4.J. A public information and education program;

3.6.b.5. A schedule of operation, including the days and hours that the facility will be open, preparations before opening, and procedures followed after closing for the day;

3.6.b.6. Anticipated daily traffic flow to and from the facility;

3.6.b.7. A description of the ultimate use for the finished yard waste compost, method for removal from the site, and a plan for use or disposal of any yard waste compost that cannot be used in the expected manner due to poor quality or change in market conditions;

3.6.b.8. Identification of the personnel required to operate and maintain the facility and their job descriptions and responsibilities;

3.6.b.9. A detailed description of the origin, quality, quantity, and type of yard waste anticipated to be received at the proposed facility. The quantity of yard waste anticipated to be received shall be estimated in both cubic yards and tonnage, and the maximum amount of compost estimated to be produced daily, monthly and annually shall be stated;

3.6.b.10. Contingency plans detailing corrective (or remedial) action to be taken in the event of equipment breakdown; air pollution (odors); unacceptable waste delivered to the facility; groundwater contamination; spills; and undesirable conditions such as fires, dust, noise, vectors, lack of a market for the yard waste compost product and unusual traffic conditions;

3.6.b.11. The procedures for the development of an operations manual. The manual must contain general design information, detailed operational information and instructions including methods of monitoring for moisture, temperature, and other quality control measures during the composting process. In addition, the manual must outline the specific procedures to be used in monitoring, sampling and analyzing finished compost material, which must be acceptable to the Secretary, provided that, as a minimum the finished compost material shall be analyzed by an approved EPA method for the concentration levels of heavy metals prior to its use. If any heavy metal concentration level exceeds regulatory standards, the finished compost material must be disposed of in an approved landfill; and

3.6.b.12. A detailed description of the yard waste composting technology to be utilized at the proposed facility.

3.6.c. Six (6) copies of the application, including all supporting documents shall be submitted as follows: four (4) copies shall be filed with the Department of Environmental Protection, Division of Waste

Management, Solid Waste Management Section, one (1) copy shall be submitted to the Solid Waste Management Board, and one copy shall be submitted to the county or regional solid waste authority for the area in which the proposed facility is to be located.

**3.7. Permit Application Fees.**

3.7.a. Each application filed for a commercial yard waste composting facility permit must be accompanied by a nonrefundable application fee made payable to the Department of Environmental Protection in the amount of five hundred (500) dollars.

3.7.b. The Department of Environmental Protection may require a fee of fifty (50) dollars or ten (10) percent of the application fee for any application refiled due to incompleteness.

**3.8. Operational Requirements for Commercial Yard Waste Composting Facilities and Non-Residential Composting Activities.**

3.8.a. The addition of any other solid waste including but not limited to hazardous, sludges, infectious, construction debris, demolition, industrial or other municipal solid waste to the yard waste is strictly prohibited.

3.8.b. Waste other than yard waste and non-compostable solid wastes shall be segregated from the compostable yard waste and promptly removed from the site for proper disposal at an approved facility. Segregated solid waste shall be removed from the facility at the end of each working day unless it is stored in containers specifically designed for storage of solid waste, provided that the material shall not remain at the facility more than thirty (30) days.

3.8.c. Screening and removal of non-compostable solid wastes from the windrows or compost piles shall occur after the composting process is completed.

3.8.d. Access to a yard waste composting facility is allowed only when an attendant is on duty.

3.8.e. Any nuisance created by a commercial yard waste composting facility or a non-residential composting activity which causes harm or injury to any person or the environment shall be abated or the composting facility or activity may be required by the Secretary to cease and desist operations.

3.8.f. Shrubs, brush, tree prunings or any other bulky, woody type materials shall be shredded, ground or otherwise reduced in size prior to being mixed with other yard wastes to be composted.

3.8.g. The operator of a yard waste composting facility shall implement, and enforce a safety program designed to prevent hazards and accidents.

3.8.h. Open burning is prohibited, except as provided by paragraph 3.1.b.3 of this rule.

3.8.i. Fugitive dust and mud deposits on main off-site roads and access roads shall be minimized at all times to limit nuisances and the operator must immediately abate any nuisances.

3.8.j. Leachate or other runoff from a compost facility shall not be permitted to drain or discharge into surface waters except when authorized under a West Virginia NPDES permit issued by the Department of Environmental Protection.



3.8.k. A one hundred (100) foot buffer zone shall be provided and maintained in a manner acceptable to the Secretary.

**3.9. Other Acceptable Compostable Materials.**

3.9.a. Other acceptable compostable materials may include, but are not limited to, coffee grounds, kitchen scraps, pet and human hair, shredded newspapers, lint and sweepings, wood ashes, fish and poultry carcasses/litter, and animal manures.

**3.10. Incorporation by Reference.**

3.10.a. The following subsections of the West Virginia Solid Waste Management, 47 CSR 38, Rule, 33CSR1 are hereby incorporated and implemented as a part of this yard waste composting rule and apply only to commercial yard waste composting facilities:

- 3.10.a.1. Subsection 3.4; "Pre-Siting Requirement for Commercial Solid Waste Facilities";
- 3.10.a.2. Subsection 3.13; "Bonding and Financial Assurance";
- 3.10.a.3. Subsection 3.17; "Draft Permit";
- 3.10.a.4. Subsection 3.18; "Permit Modification, Suspension and Revocation";
- 3.10.a.5. Subsection 3.19; "Transfer of permit";
- 3.10.a.6. Subsection 3.20; "Permit Renewal";
- 3.10.a.7. Subsection 3.21; "Public Notice";
- 3.10.a.8. Subsection 3.22; "Public Comments and Request for Public Hearings";
- 3.10.a.9. Subsection 3.23; "Public Hearings";
- 3.10.a.10. Subsection 3.24; "Reopening of the Public Comment Period";
- 3.10.a.11. Subsection 3.25; "Public Participation File";
- 3.10.a.12. Subsection 3.26; "Public Availability of Information";
- 3.10.a.13. Subsection 3.27; "Issuance and Effective Date of Permit";
- 3.10.a.14. Subsection 3.28; "Permit Review by the Secretary";
- 3.10.a.15. Subsection 3.29; "Appeals";
- 3.10.a.16. Subsection 4.5.5; "Quality Assurance and Quality Control" (applicable portions only);
- 3.10.a.17. Subsection 4.8; "Leachate Management"; and
- 3.10.a.18. Subsection 4.12; "Reporting.@"

**33-3-4. Closure Requirements for a Commercial Yard Waste Composting Facility.**

## 4.1. Maintenance Minimization.

The owner or operator shall close the facility in a manner that minimizes the need for further maintenance. All solid waste, compost, and residues shall be removed and disposed in a permitted solid waste disposal facility.

## 4.2. Closure Plan and Closure Plan Amendments.

The owner or operator of a commercial yard waste composting facility shall have a written closure plan.

## 4.2.a. Closure Plan Inclusions.

4.2.a.1. This plan shall identify the steps necessary to completely close the facility at the time when its operation is most extensive or operating at peak capacity. The closure plan must include, at a minimum, a schedule for final closure, the anticipated date when wastes will no longer be received, the date when completion of final closure is anticipated, and intervening milestone dates which will allow tracking of the progress of closure.

4.2.a.2. The closure plan shall be submitted to the Department of Environmental Protection as a part of the application for a permit. If the Secretary finds the closure plan is deficient, the closure plan shall be amended by the owner or operator within ninety (90) days of the Secretary's finding. The permit will not be issued by the Department of Environmental Protection until the amended plan meets the closure requirements.

## 4.2.b. Closure Plan Amendments.

4.2.b.1. The owner or operator shall update the closure plan with any changes in operation or facility design that affects the closure plan. The updated plan shall be submitted to the Department of Environmental Protection for approval fifteen (15) days prior to such changes. The Secretary may require modifications to any updated plan which does not meet the closure requirements.

4.2.b.2. At any time during the operating life of the facility, the amended closure plan shall be made available to the Department of Environmental Protection or the county or regional solid waste authority upon request.

## 4.3. Time Allowed for Closure.

The owner or operator shall complete closure activities in accordance with the approved closure plan and within six months after receiving the final volume of wastes. The Secretary may approve a longer closure period if the owner or operator can demonstrate that the required or planned closure activities will, of necessity, take longer than six months to complete; and that he or she has taken all necessary steps to eliminate any threat to human health and the environment from the unclosed but inactive facility.

4.3.a. At least thirty (30) days prior to the beginning of closure activities, the owner or operator shall post a sign at all points of access to the facility notifying all persons of the closing, and state that further receipt of waste materials is prohibited. Further, upon closure, suitable barriers shall be installed at all former access points to prevent new waste from being deposited.

4.3.b. Notice of the upcoming closure is a Class II legal advertisement which must be published in a local newspaper at least thirty (30) days prior to closure and a copy of the notice must be provided to the Secretary within ten (10) days of the date of publication.

4.4. Site Reclamation Responsibilities.

A uniform and compacted layer of soil that is at least six (6) inches in thickness and capable of supporting revegetation shall be placed over all disturbed land surface areas within the facility's boundaries. A revegetation plan shall be a part of the closure plan requirements and must conform with the provisions of subdivision 4.5.f of 33CSR1, the Solid Waste Management Rule.

4.5. Evidence of Proper Closure.

A compost facility shall be considered properly closed when the actions required by subsection 4.4 of this rule have been taken by the owner or operator and duly authorized representatives of the Secretary verify compliance by an on-site inspection and provide a written confirmation that closure has been completed properly.

**33-3-5. Commercial Yard Waste Composting Operator Training and Certification Program.**

5.1. Experience, Training and Education.

In order to ensure the proper, safe and efficient composting of yard waste, operators of commercial yard waste composting facilities must have a minimum of two (2) years on the job experience in yard waste composting or receive training and education in yard waste composting. The training and education shall consist of but not be limited to forty (40) classroom hours. Topics should include:

5.1.a. Proper and safe equipment operation and equipment preventive maintenance; and

5.1.b. Composting science technology which encompasses the composting process, composting methods, composting operations, site and environmental considerations, facility design and use, compost quality control, using and marketing compost, composting economics, record keeping and reporting, worker safety, business math and volumetric calculations.

5.2. Approved Training and Education Programs.

Training and education for yard waste composting shall include programs sponsored by, but not limited to, colleges and universities, agricultural extension services, and county or regional solid waste authorities: Provided that all training and education programs must be approved by the Department of Environmental Protection, Division of Waste Management.

5.3. Certification.

Any person who meets the requirements as listed in subsection 5.1 of this rule is considered a certified yard waste composting operator, provided that, written verification of on the job experience or training and education is properly submitted to, and approved by the Department of Environmental Protection.