

**Proposed Amendment 7 to VA Solid Waste Regs 9 VAC 20-80, et.seq.  
June, 2009**

9VAC20-81-95. Identification of solid waste.

C. Except as otherwise modified or excepted by 9VAC20-60, as amended, the materials listed in the regulations of the United States Environmental Protection Agency set forth in 40 CFR Part 261.4(a) are considered a solid waste for the purposes of this chapter. However, these materials are not regulated under the provisions of this chapter if all conditions specified therein are met. This list and all material definitions, reference materials and other ancillaries that are part of 40 CFR Part 261.4.(a), as incorporated, modified and/or excepted by 9VAC20-60, as amended, are incorporated as part of this chapter. In addition, the following materials are not solid wastes for the purpose of this chapter:

7. The following materials and uses listed in this part are exempt from this chapter as long as they are managed so they do not create an open dump, hazard, or public nuisance. These materials and the designated use are considered a beneficial use of waste materials:

- a. Clean wood, wood chips, or bark from land clearing, logging operations, utility line clearing and maintenance operations, pulp and paper production, and wood products manufacturing, when these materials are placed in commerce for service as mulch, landscaping, animal bedding, erosion control, habitat mitigation, wetlands restoration, or bulking agent at a **compost** facility operated in compliance with Part IV (9VAC20-81-300 et seq.) and when managed at the site of generation pursuant to a Industrial Stormwater Control General Permit issued by the DEQ Water Program pursuant to either VPDES or VPA;
- b. Clean wood combustion residues when used as a soil amendment or fertilizer, provided the application rate of the wood ash is limited to the nutrient need of the crop grown on the land on which the wood combustion residues will be applied and provided that such application meets the requirements of the Virginia Department of Agriculture and Consumer Services (2VAC5-400 and 2VAC5-410);
- c. **Compost** that satisfies the applicable requirements of the Virginia Department of Agriculture and Consumer Services (2VAC5-400 and 2VAC5-410);

D. The following activities are conditionally exempt from this chapter provided no open dump, hazard, or public nuisance is created:

1. **Composting** of sewage sludge at the sewage treatment plant of generation without addition of other types of solid wastes.
2. **Composting** of household waste generated at a residence and **composted** at the site of generation.
3. **Composting** activities performed for educational purposes as long as no more than 100 cubic yards of materials are on site at any time. Greater quantities will be allowed with suitable justification presented to the department. For quantities greater than 100 cubic yards, approval from the department will be required prior to **composting**.
4. **Composting** of animal carcasses on-site at the farm of generation.
5. **Composting** of vegetative waste and/or yard waste generated on-site by owners or operators of agricultural operations or owners of the real property or those authorized by the owners of the real property provided:
  - a. All decomposed vegetative waste and **compost** produced is utilized on said property;
  - b. No vegetative waste or other waste material generated from other sources other than said property is received;
  - c. All applicable standards of local ordinances that govern or concern vegetative waste handling, **composting**, storage or disposal are satisfied; and
  - d. They pose no nuisance or present no potential threat to human health or the environment.
6. **Composting** of yard waste by owners or operators who accept yard waste generated off-site shall be exempt from all other provisions of this chapter as applied to the **composting** activities provided the requirements of 9VAC20-81-397 B are met.
7. **Composting** of pre-consumer food waste and kitchen culls generated on-site and **composted** in containers designed to prohibit vector attraction and prevent nuisance odor generation.
8. Vermicomposting, when used to process Category I, Category II, or Category III feedstocks in containers designed to prohibit vector attraction and prevent nuisance odor generation. If offsite

feedstocks are received no more than 100 cubic yards of materials may be on-site at any one time. For quantities greater than 100 cubic yards, approval from the department will be required prior to composting.

9. Composting of sewage sludge or combinations of sewage sludge with non-hazardous solid waste provided the composting facility is permitted under the requirements of a Virginia Pollution Abatement (VPA) or VPDES permit.

9VAC20-81-300

Part IV

Other Solid Waste Management Facility Standards

9VAC20-81-310. Applicability.

A. Solid Waste Compost Facilities.

1. The standards in this part shall apply to owners and operators of facilities producing compost from municipal solid waste/refuse or combinations of municipal solid waste/refuse with animal manures.

a. Composting facilities that employ the enclosed vessel method are referred to as Type A ("confined") compost facilities. Facilities that employ the windrow or aerated static pile method are referred to as Type B compost facilities. The only composting processes that may be employed are those with prior operational performance in the United States. Any other proposed composting process shall conform to the standards contained in 9VAC20-81-395 and will require an experimental solid waste management facility permit.

b. Use of solid waste containing hazardous waste, regulated medical waste, or nonbiodegradable waste is prohibited.

2. The standards contained in this part are not applicable to composting exempt under 9VAC20-81-95.

3. The feedstocks for composting are classified on the basis of the type of waste used in the composting process. The categories of feedstocks are as follows:

a. Category I—Pre-consumer, plant or plant-derived materials such as:

- (1) Agriculture crop residues including, but not limited to, harvesting residuals, straw, and cornstalks;
- (2) Livestock feed including, but not limited to, hay, grain, silage, cottonseed meal, soybean meal;
- (3) Nonfood agricultural processing waste including, but not limited to, cotton gin trash, wool carding residue, field corn cobs;
- (4) Source-separated pre-consumer food wastes including but not limited to wholesale and retail market residuals (e.g., overripe, damaged, or otherwise rejected fruit or vegetables, food preparation wastes including prepared but unserved foods) and institutional kitchen culls;
- (5) Food processing wastes including culls, peelings, hulls, stems, pits, seed, pulp, shucks, nut shells, apple pomace, corn cobs, cranberry filter cake, olive husks, potato tops, cocoa shells, fruit and vegetable processing waste, rejected products, and bakery wastes;
- (6) Source-separated clean waste paper;
- (7) Vegetative Waste; and
- (8) Yard Waste.

b. Category II—Animal-derived waste material such as:

- (1) Dairy processing wastes including but not limited to spoiled milk, cheese, curd, and yogurt.
- (2) Fish processing wastes including but not limited to eggs, fish gurry and racks, clam bellies, fish shells, fish processing sludge, fish breeding crumbs, mussel, crab, lobster, and shrimp wastes.

c. Category III—Animal and post-consumer food wastes with pathogen potential such as:

- (1) Source-separated wastes including but not limited to restaurant waste, institutional kitchen wastes, plate scrapings;

- (2) Animal manures including but not limited to spoiled stable straw bedding, livestock feedlot, holding pen and cage scrapings, dairy manure semi-solids, poultry litter and manure; and
- (3) Rendered animals.
- d. Category IV —Other wastes such as:
  - (1) Non-rendered animal meat waste including but not limited to animal carcasses, slaughterhouse waste, paunch manure;
  - (2) Mixed non-source separated organic wastes including but not limited to municipal solid waste; and
  - (3) Industrial sludge.

9VAC20-81-320. Siting requirements.

The siting of all **compost** facilities, solid waste transfer stations, centralized waste treatment facilities, materials recovery facilities, waste to energy and incineration facilities, and waste piles shall be governed by the standards as set forth in this section.

A. Facilities shall be adjacent to or have direct access to roads that are paved or surfaced and capable of withstanding anticipated load limits. Solid waste management facilities storing or treating solid waste in piles such as but not limited to **compost** facilities and waste piles may also have direct access to gravel roads.

B. Facilities shall not be sited or constructed in areas subject to base floods. For materials recovery facilities, this siting prohibition does not apply to facilities recovering materials from industrial wastewater received from off-site.

C. No facility activity shall be closer than:

- 1. 50 feet to its property boundary;
- 2. 200 feet to any residence, a health care facility, school, recreational park area, or similar type public institution;
- 3. 50 feet to any perennial stream or river. For materials recovery facilities, this siting prohibition does not apply to those facilities recovering materials from industrial wastewater received from off-site; and,
- 4. For facilities treating or storing solid waste in piles, no closer than 50 feet to any wetland.

D. Sites shall allow for sufficient room to minimize traffic congestion and allow for safe operation.

E. In addition to 9VAC20-81-320 A through D, for waste piles, unless the waste piles are located inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated, such waste piles shall be provided with an adequate area to allow for proper management in accordance with 9VAC20-81-330 F and 9VAC20-81-340 F.

F. In addition to 9VAC20-81-320 A through D, for **compost** facilities:

- 1. Acceptable sites must have sufficient area and terrain to allow for proper management of run-on, run-off, and leachate, and to allow for a buffer zone with the minimum size of 100 feet between the property boundary and the actual **composting** activity.
- 2. Type B facilities shall not be located in areas which are geologically unstable or where the site topography is heavily dissected.
- 3. Type B facilities shall not be located in any area where the seasonal high water table lies within two feet of the ground surface unless only Category I wastes are processed at the facility.

9VAC20-81-330. Design and construction requirements.

The design and construction of all **compost** facilities, solid waste transfer stations, centralized waste treatment facilities, materials recovery facilities, waste to energy and incineration facilities, and waste piles shall be governed by the standards as set forth in this section.

A. **Compost** Facilities

- 1. For facilities that will **compost** only Category I feedstocks:
  - a. A handling area and equipment shall be provided to segregate the Category I waste from non**compost**able components and to store such components in appropriate containers prior to proper management and disposal.
  - b. If the facility is located in any area where the seasonal high water table lies within two feet of the ground surface, the **composting** and handling areas shall be hard-surfaced and diked or

bermed to prevent run-on, collect runoff, and provided with a drainage system to route the collected runoff to a treatment, disposal or holding facility, discharged under a VPDES permit, or recirculated within the composting process.

c. Engineering controls shall be incorporated into design of facilities located on sites with:

- (1) Springs, seeps, and other groundwater intrusions;
- (2) Gas, water, or sewage lines under the active areas; and/or
- (3) Electrical transmission lines above or below the active areas.

d. Areas used for mixing, composting, curing, screening, and storing shall be graded to prevent run-on, collect runoff, and provided with a drainage system to route the collected runoff to a treatment, disposal or holding facility, discharged under a VPDES permit, or recirculated within the composting process.

e. Roads serving the unloading, handling, composting, and storage areas shall be usable under all weather conditions.

2. Facilities for the composting of Category II, III, and/or IV feedstocks, including those that will mix these feedstocks with Category I feedstocks, shall be provided with:

a. Covered areas for receiving, segregation, and grading of the waste shall be provided to segregate the waste from noncompostable components and to store such components in properly constructed containers prior to proper management and disposal.

b. Areas used for mixing, composting, curing, screening, and storing shall be graded to prevent run-on, collect runoff, and provided with a drainage system to route the collected runoff to a treatment, disposal or holding facility, discharged under a VPDES permit, or recirculated within the composting process.

c. If the facility is located in any area where the seasonal high water table lies within two feet of the ground surface, the composting and handling areas shall be hard-surfaced and diked or bermed to prevent run-on, collect runoff, and provided with a drainage system to route the collected runoff to a treatment, disposal or holding facility, discharged under a VPDES permit, or recirculated within the composting process.

d. Where any Category IV feedstocks are received, or where more than 1000 total tons/quarter of Category II and/or III feedstocks are received, all receiving, mixing, composting, curing, screening, and storing operations shall be provided with one of the following:

- (1) An asphalt or concrete area that drains directly to a wastewater storage, treatment, or disposal facility; or
- (2) An asphalt, or concrete, and diked or bermed area to prevent entry of run-on or escape of run-off, leachate, or other liquids, and a sump with either a gravity discharge or an adequately sized pump located at the low point of the hard-surfaced area to convey liquids to a wastewater treatment, disposal or holding facility, discharged under a VPDES permit, or recirculated within the composting process; or
- (3) A lime stabilized area may be substituted for the asphalt or concrete specified under subdivision A 2 c (2) of this subsection. The lime stabilized clay/soil area must be a minimum of six inches thick and have a lab-tested permeability of  $1 \times 10^{-7}$  cm/sec.

e. Area and appropriate equipment shall be provided to segregate nonbiodegradable or otherwise undesirable components from the municipal solid waste to be processed.

f. For Type B facilities, engineering controls shall be incorporated into design of facilities located on sites with:

- (1) Springs, seeps, and other groundwater intrusions;
- (2) Gas, water, or sewage lines under the active areas; or
- (3) Electrical transmission lines above or below the active areas.

g. Roads serving the unloading, composting, and storage areas shall be of all-weather construction.

h. Auxiliary power, standby equipment, or contingency arrangements shall be required to ensure continuity of composting operations.

i. For uncovered sites, calculations for sizing of surface water control features will be based on a rainfall intensity of one hour duration and a 10 year return period.

9VAC20-81-340. Operation requirements.

The operation of all **compost** facilities, solid waste transfer stations, centralized waste treatment facilities, materials recovery facilities, waste to energy and incineration facilities, and waste piles shall be governed by the standards as set forth in this section. Operations for these facilities will be detailed in an operations manual which shall be maintained in the operating record in accordance with 9VAC20-81-485. This operations manual will include an operations plan, an inspection plan, a health and safety plan, an unauthorized waste control plan, and an emergency contingency plan meeting the requirements of this section and 9VAC20-81-485. This manual shall be made available to the department when requested. If the applicable standards of this chapter and the facility's Operations Manual conflict, this chapter shall take precedence.

A. **Compost** Facilities

1. For facilities that will **compost** only Category I wastes:
  - a. Non**compost**able or other undesirable solid waste shall be segregated from the material to be **composted**. Solid waste which is not **composted**, salvaged, reused, or sold must be disposed at an appropriately permitted solid waste management facility.
  - b. The addition of any other solid waste including but not limited to hazardous waste, regulated medical waste, construction waste, debris, demolition waste, industrial waste, or other municipal solid waste to the Category I waste received at the **composting** facility is prohibited, except that the materials which are excluded under 9VAC20-81-95 may be combined with Category I waste for the purpose of producing **compost** under the provisions of this chapter.
  - c. Access to the **composting** facility shall be permitted only when an attendant is on duty.
  - d. Dust, odors, and vectors shall be controlled so they do not constitute nuisances or hazards. Fugitive dust and mud deposits on main off-site roads and access roads shall be minimized at all times to limit nuisances. Dust shall be controlled to meet the requirements of 9VAC5-40-60 *et seq.*
  - e. The owner or operator shall prepare, implement, and enforce a safety program and a fire prevention and suppression program designed to minimize hazards.
  - f. Open burning shall be prohibited on the facility property.
  - g. Leachate or other runoff from the facility shall not be permitted to drain or discharge directly into surface waters, unless authorized by a VPDES permit.
  - h. Designed buffer zones shall be maintained.

2. Facilities for the **composting** of Category II, III, and/or IV feedstocks, including those that mix these categories with Category I feedstocks, shall be provided with:
  - a. Non**compost**able or other undesirable solid waste shall be segregated from the material to be **composted**. Solid waste which is not **composted**, salvaged, reused, or sold must be disposed at an appropriately permitted solid waste management facility.
  - b. Product testing and standards. Products will continue to be considered as solid wastes until the testing indicates that they attain appropriate standards. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity and shall be conducted in a manner consistent with SW-846, as amended, and other applicable standards. The minimum number of samples that shall be collected and analyzed is shown in the table below. Samples to be analyzed for metals shall be **composted** prior to the analysis.

Minimum Frequency of Analysis

Amount of finished <b>compost</b> <sup>1</sup> (metric tons per 365 day period)	Frequency <sup>2</sup>
Less than 290	Once per year.
Equal to or greater than 290 but less than 1,500	Once per quarter (four times per year).
Equal to or greater than 1,500 but less than 15,000	Once per 60 days (six times per year).
Equal to or greater than 15,000	Once per month (12 times per year).

<sup>1</sup>Either the amount of finished **compost** applied to the land or prepared for sale or give-away for application to the land (dry weight basis).

<sup>2</sup>After the finished **compost** has been monitored for two years at the frequency in the above table, the facility may request that the department reduce the frequency of monitoring.



c. All finished products will be tested for **compost** stability using one of the methods listed below.

- (1) Temperature decline to near ambient conditions when not the result of improper management of the **composting** process. **Composting** records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of **composting** feedstocks.
- (2) Reheat potential using the Dewar **Compost** Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 10°C for stable **compost**. Very stable **compost** will not exceed 10°C above ambient.
- (3) Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.
- (4) Solvita™ **Compost** Maturity Test. To be classified as stable the product must exhibit color equal or greater than six.
- (5) Carbon dioxide evolution. To be classified as stable the product must not evolve more than 1,000 milligrams of carbon dioxide per liter per day.

d. Pathogens and Parasites. In addition to testing required of this subsection, finished products produced from any Category III and IV materials will be tested for the presence of the following organisms using the methods indicated below.

- (1) Parasites. The density of viable helminth ova in the finished **compost** shall be less than one per four grams of total solids (dry weight basis) at the time the finished **compost** is prepared for sale or give away in a container for application to the land. Viable helminth ova reduction shall be demonstrated by testing the finished **compost** once per quarter for a period of 1 year. After the viable helminth ova reduction has been demonstrated for the **composting** process, additional helminth ova testing will not be required provided the **composting** operating parameters and incoming waste stream are consistent with the values or ranges of values documented during the initial helminth ova reduction demonstration. If the **composting** parameters or incoming waste stream change a new viable helminth ova reduction demonstration is required, and;
- (2) Bacteria Pathogens. Either the density of fecal coliform in the finished **compost** shall be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the finished **compost** shall be less than 3 MPN per 4 grams of total solids (dry weight basis) at the time the finished **compost** is prepared for sale or give away in a container for application to the land.
- (3) Other test methods, or facility operating standards may be used in lieu of the above parasite and pathogen testing requirements as approved by the department.

e. Metals. In addition to the testing requirements contained in this subsection, all finished products produced from Category IV materials shall be analyzed for the metals shown below. The concentration of contaminants shall not exceed the following levels:

Metal	Concentration, mg/kg dry solids
Arsenic	41
Cadmium	21
Copper	1500
Lead	300
Mercury	17
Molybdenum	54
Nickel	420
Selenium	28

Zinc	2,800
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- f. Designed buffer zones shall be maintained.
- g. The owner or operator shall prepare an operation plan which shall include as a minimum:
- (1) The description of types of wastes that will be managed at the facility. This description will be sufficient to properly categorize the **compost** feedstocks in accordance with 9VAC20-81-310 A 4. If the specific materials are not listed in that section, a discussion will be prepared which compares the materials that the facility will receive with the materials listed in the appropriate feedstock category and justifies the categorization of the proposed feedstock. For each type of material an approximate C:N ratio will be provided. The expected quantity of any bulking agent or amendment will be provided (if applicable); and any expected recycle of bulking agent or **compost**. The plan shall include the annual solid waste input, the service area population (both present and projected if applicable), and any seasonal variations in the solid waste type and quantity;
  - (2) A discussion of the **composting** process including:
    - (a) For Type A **compost** facilities the following will be provided:
      - (i) A copy of the manufacturer's operating manual, and drawings and specifications of the **composting** unit will be provided.
      - (ii) A discussion of the unit's requirements for power, water supply, and wastewater removal, and the steps taken to accommodate these requirements.
    - (b) For Type B **compost** facilities the following will be provided:
      - (i) A description of the configuration of the **composting** process including **compost** pile sizing, and orientation, provisions for water supply, provisions for wastewater disposal, and an equipment list.
      - (ii) A discussion of procedures and frequency for moisture, and temperature monitoring, and aeration.
      - (iii) A discussion of pile formation, and feedstock proportioning and feedstock preparation.
  - (3) A discussion of the method and frequency of final product testing in accordance with this subsection will be provided;
  - (4) 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;
  - (5) Anticipated daily traffic flow to and from the facility, including the number of trips by private or public collection vehicles;
  - (6) The procedure for unloading trucks (including frequency, rate, and method);
  - (7) A contingency plan detailing corrective or remedial action to be taken in the event of equipment breakdown; air pollution (odors); unacceptable waste delivered to the facility; spills; and undesirable conditions such as fires, dust, noise, vectors, and unusual traffic conditions;
  - (8) Special precautions or procedures for operation during wind, heavy rain, snow, and freezing conditions;
  - (9) A description of the ultimate use for the finished **compost**, method for removal from the site, and a plan for use or disposal of finished **compost** that cannot be used in the expected manner due to poor quality or change in market conditions;
  - (10) A discussion of inspections in accordance with A 2 h (3) of this section; and
  - (11) A discussion of records to be maintained in accordance with 9VAC20-81-350.
- h. Maintenance.
- (1) Facility components shall be maintained and operated in accordance with the permit and intended use of the facility.
  - (2) Adequate numbers, types and sizes of properly maintained equipment shall be available at the facility during all hours of operation to prevent curtailment of operations

because of equipment failure except under extraordinary conditions beyond the control of the facility's owner or operator.

(3) The facility owner or operator shall monitor and inspect the facility for malfunctions, deteriorations, operator errors, and discharges that may cause a release to the environment or a threat to human health. The facility owner or operator shall promptly remedy any deterioration or malfunction of equipment or structures or any other problems revealed by the inspections to ensure that no environmental or human health hazard develops. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

(4) The amount of **compost** stored at the facility shall not exceed the designed storage capacity.

i. Leachate or other runoff from the facility shall not be permitted to drain or discharge directly into surface waters, unless authorized by a VPDES permit.

#### 9VAC20-81-350. Recordkeeping requirements.

Recordkeeping for **compost** facilities, solid waste transfer stations, centralized waste treatment facilities, materials recovery facilities, waste to energy and incineration facilities, waste piles, and miscellaneous facilities shall be governed by the standards as set forth in this section. Records to be maintained include:

A. The facility owner or operator shall record self-inspections in an inspection log. These records shall be retained for at least three years from the date of inspection. They must include the date and time of the inspection, the name of the inspector, a description of the inspection including the identity of specific equipment and structures inspected, the observations recorded, and the date and nature of any remedial actions implemented or repairs made as a result of the inspection.

B. The facility owner or operator shall record any monitoring information (including all calibration and maintenance records and copies of all reports required by this part or the permit or permit-by-rule). Records for monitoring information shall include: the date, exact place, and time of sampling or measurements; the name of the individual who performed the sampling and measurement; the date analyses were performed; the name of the individual who performed the analyses; the analytical techniques or methods used; and the result of such analyses. Additional information relating to the analysis, including records of internal laboratory quality assurance and control, shall be made available to the department at its request.

C. The facility owner or operator shall retain records of all unauthorized solid waste accepted identifying the waste and its final disposition. Such records shall include the date solid waste was received, the type of solid waste received, the date of disposal, the disposal method and location.

D. The records shall be retained in the operating record for the facility for a period of at least three years from the date of the sample analysis, measurement, report or application.

#### 9VAC20-81-360. Closure requirements.

A. The closure of all **compost** facilities, solid waste transfer stations, centralized waste treatment facilities, materials recovery facilities, waste to energy and incineration facilities and waste piles shall be governed by the standards as set forth in this section:

1. The owner or operator shall close his facility in a manner that minimizes the need for further maintenance, and controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, the post-closure escape of uncontrolled leachate, surface runoff, or waste decomposition products to the groundwater, surface water, or to the atmosphere.

a. At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate. For miscellaneous units, all waste, materials contaminated with waste constituents, and treatment residue shall be removed and disposed in a permitted facility.

b. If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in A 1 a of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall close the facility and perform



post-closure care in accordance with the closure and post-closure care requirements of Part III (9VAC20-81-160 and 170, respectively). In addition, for **compost** facilities, other corrective measures approved by the department may be used to remediate the site.

2. Closure plan and modification of plan.

a. The owner or operator of any facility shall have a written closure plan. This plan shall identify the steps necessary to completely close the facility/unit at its full operation under the permit conditions. The closure plan shall include, at least a schedule for final closure including, as a minimum, 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.

b. The owner or operator may amend his closure plan at any time during the active life of the facility. The owner or operator shall so amend his plan any time changes in operating plans or facility design affects the closure plan. The amended closure plan shall be placed in the operating record.

c. The owner or operator shall submit to the department the amended closure plan that was placed in the operating record.

d. At least 180 days prior to beginning closure of each unit, the owner or operator shall notify the department of the intent to close.

e. The owner or operator shall provide to the department a certification from a professional engineer that the facility has been closed in accordance with the closure plan.

3. Time allowed for closure.

a. The owner or operator shall complete closure activities in accordance with the closure plan and within six months after receiving the final volume of wastes. The director 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 has taken all steps to eliminate any significant threat to human health and the environment from the unclosed but inactive facility.

b. The owner or operator shall post one sign notifying all persons of the closing, and providing a notice prohibiting further receipt of waste materials. The sign will remain in place until closure activities are complete. Further, suitable barriers shall be installed at former accesses to prevent new waste from being delivered.

4. Inspection:

The department shall inspect all facilities at the time of closure to confirm that the closing is complete and adequate. It shall notify the owner of a closed facility, in writing, if the closure is satisfactory, and shall require any necessary construction or such other steps as may be necessary to bring unsatisfactory sites into compliance with this chapter.

9VAC20-81-397. Exempt facilities.

A. Applicability

2. The standards in subsection B apply to persons who **compost** vegetative waste in a manner described in the conditional exemption set forth at 9VAC20-81-95 D.

3. The standards in subsection C apply to persons who operate small vegetative waste disposal units on their property.

B. **Composting** of Yard Waste

Additional requirements for managing conditionally exempt yard waste **compost** facilities, described under 9VAC20-81-95 D 6, are listed below.

1. Owners or operators of agricultural operational activities which accept only yard waste generated off-site are exempt from all other provisions of this chapter as applied to the **composting** activities provided that:

a. The total time for **composting** process and storage of material that is being **composted** shall not exceed 18 months prior to its field application or sale as a horticultural or agricultural product;

b. No waste material other than yard waste is received;

- c. The total amount of yard waste received from off-site never exceeds 6,000 cubic yards in any consecutive 12 month period;
  - d. All applicable standards of local ordinances that govern or concern yard waste handling, **composting**, storage or disposal are satisfied;
  - e. They pose no nuisance or present or potential threat to human health or the environment; and
  - f. Before receiving any waste, the owner submits a complete DEQ Form YW-3:
2. Owners or operators of agricultural operations which accept only yard waste and manures from herbivorous animals generated off-site are exempt from all other provisions of this chapter as applied to the **composting** activities provided that:
- a. The **composting** area is located not less 300 feet from a property boundary of a parcel owned or controlled by another person, is located not less than 1,000 feet from an occupied dwelling not located on the same property as the **composting** area, and is not located within an area designated as a flood plain;
  - b. The agricultural operation has at least one acre of ground suitable to receive yard waste for each 150 cubic yards of finished **compost**;
  - c. The total time for the **composting** process and storage of material that is being **composted** or has been **composted** shall not exceed 18 months prior to the field application or sale as horticultural or agricultural product;
  - d. The owner or operator of any agricultural operation that receives in any 12 month period (consecutive) more than 6,000 cubic yards of yard waste generated from property not within the control of the owner or the operator shall submit by April 1 each year to the director an annual report in accordance with 9VAC20-81-397 B 4 describing the volume and types of yard waste received for **composting** by the operation between January 1 and December 31 of the preceding consecutive 12 months and shall certify that the yard waste **composting** facility complies with local ordinances;
  - e. No waste material other than yard waste and manures from herbivorous animals are received;
  - f. The quantities of off-site manures from herbivorous animals brought on-site are limited to achieve a carbon to nitrogen ratio of 25: 1 to 30: 1. All manures must be incorporated into the **compost** within 24 hours of delivery. No off-site manures may be stored on-site; and
  - g. Prior to the receipt of solid waste generated off-site, the owner or operator of the agricultural operation intending to operate under this exemption shall submit a complete DEQ Form YW-4.
3. Owners or other persons authorized by the owner of real property who receive only yard waste generated off-site for the purpose of producing **compost** on said property shall be exempt from all requirements of this chapter as applied to the **composting** activity provided that:
- a. Not more than 500 cubic yards of yard waste generated off-site is received at the owner's said property in any consecutive 12 month period;
  - b. No compensation will be received, either directly or indirectly, by the owner or other persons authorized by the owner of said property from parties providing yard waste generated off said property;
  - c. All applicable standards of local ordinances that govern or concern yard waste handling, **composting**, storage or disposal are satisfied; and
  - d. They pose no nuisance or present or potential threat to human health or the environment.
4. Annual reports: owners or operators of an agricultural **composting** operation in accordance with 9VAC20-81-397 B 2 of this section, who are exempt from the permitting requirements in accordance with 9VAC20-81-95 D and who may receive more than 6,000 cubic yards of yard waste generated from property not within the control of the owner or operator in any 12 month period, shall submit an annual report on DEQ Form YW-2. The report shall describe the volume and types of yard waste received for **composting**. Completion and filing of the form by July 15 for activities in the preceding 12 months (January 1 through December 31) constitutes compliance with the requirements. The annual report shall be submitted on DEQ Form YW-2.

#### C. Small Disposal Units for Vegetative Wastes from Land Clearing

Additional requirements for managing small disposal units for vegetative waste from land clearing as exempted under 9VAC20-81-95 D 20 are listed below:

1. Owners of real property who operate small waste disposal units that qualify under all the conditions of this subsection shall be exempt from other provisions, including permitting, of this chapter as applied to those units provided:

- a. No person other than the owner of the real property shall be exempt under this section.
- b. All owners of the real property who hold title to property at the time the disposal unit is initially opened or during the time the unit remains open (limited to two calendar years below) shall, in the exercise of this exemption, accept responsibility for maintaining compliance of the unit with all requirements of this chapter as set out in this exemption.
- c. The owner agrees that he shall not sell, give or otherwise transfer the responsibility for the unit's compliance to any other party throughout its active life, the post-closure care period, and the corrective action period, and that he shall remain the principal party responsible for the compliance of the unit with this chapter.

d. Only units that are in compliance with all requirements of this section shall qualify, and units that are not in compliance with all requirements of this section shall not qualify or shall cease to qualify. Units that qualify for this exemption shall comply with the following requirements:

- (1) Only vegetative waste or yard waste shall be placed in the disposal unit; however, grass trimmings or bulk leaves shall not be placed in the disposal unit.
- (2) The waste disposal unit shall not be larger than 0.50 acres in size.
- (3) The waste disposal unit shall not be located within 1,000 feet of any other waste disposal unit of any type, including other disposal units exempted by this chapter.
- (4) The waste disposal unit shall not be located within 150 feet of any existing building or planned building. The waste disposal unit shall not be located within 50 feet of any existing or planned subdivision lot that may be used for the erection of a building.
- (5) The waste disposal unit shall not be located within 100 feet of a flowing stream; body of water; any well, spring, sinkhole, or unstable geologic feature. Also, it shall not be located within 200 feet of any groundwater source of drinking water.
- (6) The waste disposal unit shall be constructed to separate all waste by at least two feet vertically from the seasonal high water table.
- (7) The waste disposal unit should not obstruct the scenic view from any public road and should be graded to present a good appearance.
- (8) Mounding of the waste disposal unit shall not reach an elevation more than 20 feet above the original elevation of the terrain before the disposal began. The elevation of the original terrain should be based on the general area and not the bottom of ravines and small depressions in the disposal area.
- (9) The waste received by the waste disposal unit shall be limited to the following:
  - (a) Waste generated on-site;
  - (b) Waste generated by clearing the path of a roadway or appurtenances to the roadway when buried within the right-of-way of the roadway (waste shall not be buried in the structural roadway prism) or adjacent land under a permanent easement and the terms of the easement incorporate the construction of the disposal unit; and
  - (c) Waste from property that is owned by the owner of the disposal unit, within the same construction project, and generated not more than two miles from the unit.
- (10) The waste disposal unit shall be closed two calendar years from the date it first receives waste. The closure shall include cover with two feet of compacted soil, grading for good appearance with slopes that prevent erosion, and seeding or revegetation. During the life of the unit, sufficient earth should be applied periodically to prevent excessive subsidence of the waste disposal unit when closed. Sides of the finished unit shall be sloped to prevent erosion, and slopes shall not be steeper than one vertical foot to three horizontal feet.
- (11) The location plat and legal description, as set out in subdivision (16) of this subsection, of all units that are not located wholly within the bed or right-of-way of a

public road shall be recorded in the deed book for the property in the court of record prior to the first receipt of waste. Waste disposal shall not be allowed within the structural roadway prism.

(12) The owner shall maintain continuous control of access to all disposal units from the time they are opened until they are closed in accordance with this section. The owner shall prevent fires and provide standby equipment and supplies sufficient to easily suppress a fire. Brush and small limbs that might provide tinder for a fire shall be covered at the end of the work day with one foot of soil.

(13) The owner shall not be exempt from the CDD landfill groundwater monitoring and corrective action requirements of the 9VAC20-81-250 and 260, respectively, to include required monitoring during the post-closure period.

(14) The owner shall not be exempt from the decomposition gas monitoring and venting requirements of 9VAC20-81-210. The owner of a small waste disposal unit shall comply in all respects with the decomposition gas monitoring and venting requirements as established in this chapter.

(15) The owner shall not be exempt from any requirement of the Financial Assurance Regulations For Solid Waste Disposal Facilities, 9VAC20-70-10 et seq., and shall comply with all financial assurance requirements.

(16) At least six weeks before beginning construction of a vegetative waste disposal unit, the owner of the real property shall notify in writing the director, the governing board of the city, county or town wherein the property lies, and all property owners whose parcel will abut the area of the proposed disposal unit. The notice shall give the names and legal addresses of the owners, the type of unit to be developed, and the projected date of initial construction of the unit. The owner shall include a plat and legal description of the disposal unit's metes and bounds prepared and stamped by a Virginia licensed land surveyor. The plat and description shall follow all standard practice such as inclusion of the nearest existing intersection of state roads and existing fixed survey markers in the vicinity.

(17) Unless otherwise designated, all monitoring and reporting requirements shall begin at the initiation of the disposal operations and all reports shall be sent to the department and the chief executive of the local government.

#### 9VAC20-81-410. Permits-by-rule and other special permits.

##### A. Permits by rule.

1. As an alternate to obtaining a full permit, an owner or operator of any of the following facilities may elect to operate under this section:

- a. **compost** facility;
- b. solid waste transfer station;
- c. materials recovery facility;
- d. waste to energy, thermal treatment, or incineration facility; or
- e. waste pile.

2. Submission. The owner or operator of an above facility shall be deemed to have a solid waste management facility permit notwithstanding any other provisions of Part V (9VAC20-81-400 et seq.), except 9VAC20-81-450 B 2 and B 3, if the owner or operator provides to the department the below information and the department acknowledges completeness of the submittal per A 4 of this section:

- a. a notice of intent to operate such a facility with documentation required under 9VAC20-81-450 B;
- b. a certification that the facility meets the siting standards, as applicable, of 9VAC20-81-320.
- c. a certification that the facility meets the statutory requirements for consistency with solid waste management plans as recorded in §§ 10.1-1408.1 of the Code of Virginia.
- d. a certification that the standards, as applicable, of 9VAC20-81-340 are met in an Operations Manual to be maintained in the operating record in accordance with 9VAC20-81-485;
- e. a certificate signed by a professional engineer that:

- (1) The facility has been designed and constructed in accordance with the standards, as applicable, of 9VAC20-81-330;
  - (2) The standards, as applicable, of 9VAC20-81-360 are met in a Closure Plan to be maintained in the operating record;
  - f. demonstration of legal control over the site for the permit life;
  - g. a certification from the State Corporation Commission that the business entity pursuing the permit-by-rule status is a valid entity, authorized to transact its business in Virginia. This requirement does not apply to those facilities owned solely by governmental units;
  - h. closure cost estimates and proof of financial responsibility as required by the Financial Assurance Regulations for Solid Waste Disposal, Transfer, and Treatment Facilities (9VAC20-70-10 et seq.); proof of financial responsibility must be for the entity identified in A 2 g of this section;
  - i. the results of the public participation effort conducted in accordance with the requirements contained in A 3 of this section;
  - j. the following additional information for the specific facilities as noted:
    - (1) For **compost** facilities only, a description of the type of facility and the classification of materials that will be **composted** as classified under 9VAC20-81-310 A 4;
    - (2) For waste piles only, proof that the facility has a valid VPDES permit, if applicable.
    - (3) For waste to energy, thermal treatment, or incineration facilities or materials recovery facilities engaged in reclamation of petroleum-contaminated materials only:
      - (a) Proof that the facility has a permit issued in accordance with the regulations promulgated by the Air Pollution Control Board, and
      - (b) In the case of thermal treatment facilities or materials recovery facilities engaged in reclamation of petroleum-contaminated materials, a description of how the requirements of 9VAC20-81-660 will be met; and
  - k. the appropriate permit fees under the provisions of 9VAC20-90-10 et seq.
3. Public participation.
- a. Before the initiation of any construction at the facility under A 1 of this section, the owner or operator shall publish a notice once a week for two consecutive weeks in a major local newspaper of general circulation of the intent to construct and operate a facility eligible for a permit-by-rule. The notice shall include:
    - (1) A brief description of the proposed facility and its location;
    - (2) A statement that the purpose of the public participation is to acquaint the public with the technical aspects of the facility and how the standards and the requirements of this chapter will be met, to identify issues of concern, to facilitate communication and to establish a dialogue between the permittee and persons who may be affected by the facility;
    - (3) Announcement of a 30 day comment period, in accordance with A 3 d of this section, and the name, telephone number, and address of the owner's or operator's representative who can be contacted by the interested persons to answer questions or where comments shall be sent;
    - (4) Announcement of the date, time, and place for a public meeting held in accordance with A 3 c of this section; and
    - (5) Location where copies of the documentation to be submitted to the department in support of the permit-by-rule notification can be viewed and copied.
  - b. The owner or operator shall place a copy of the documentation and support documents in a location accessible to the public in the vicinity of the proposed facility.
  - c. The owner or operator shall hold a public meeting not earlier than 15 days after the publication of the notice required in A 3 a of this section and no later than seven days before the close of the 30 day comment period. The meeting shall be held to the extent practicable in the vicinity of the proposed facility at a time convenient for the public.



d. The public shall be provided 30 days to comment on the technical and the regulatory aspects of the proposal. The comment period will begin on the date the owner or operator publishes the notice in the local newspaper.

e. The requirements of this section do not apply to the owners or operators of a material recovery facility, waste to energy facility, incinerator or a thermal treatment unit that has received a permit from the department based on the regulations promulgated by the State Air Pollution Control Board or State Water Control Board that required facility-specific public participation procedures.

4. **Completeness Review.** Upon receiving the certifications and other required documents, including the results of the public meeting and the applicant's response to the comments received, the department shall conduct a completeness review and respond within 30 calendar days. If the applicant's submission is administratively complete, the applicant shall be deemed to operate under Permit-by-Rule status. If the applicant's submission is administratively incomplete, the applicant shall be deemed to not have a permit-by-rule. The department may require the operator to submit the full permit application and to obtain a regular solid waste management facility permit if it is determined the requested operation does not qualify for permit-by-rule status.

5. **Change of ownership.** A permit by rule may not be transferred by the permittee to a new owner or operator. However, when the property transfer takes place without proper closure, the new owner shall notify the department of the sale and fulfill all the requirements contained in A 2 of this section. Upon presentation of the financial assurance proof required by 9VAC20-70-10 et seq. by the new owner, the department will release the former owner from his closure and financial responsibilities and acknowledge existence of the new permit by rule in the name of the new owner.

6. **Facility modifications.** The owner or operator of a facility operating under a permit by rule may modify its design and operation by furnishing the department a new certificate and appropriate permit fees under the provisions of 9VAC20-90-10 et seq. For modifications of design, the new certificate shall be prepared by a professional engineer and shall include new documentation required under A 2, as applicable, and A 3 of this section. For modifications to the operations, the owner or operator shall submit to the department a new certificate and documentation required under A 2 of this section, as applicable. Whenever modifications in the design or operation of the facility affect the provisions of the closure plan, the owner or operator shall revise the closure plan and submit to the department a new certificate and documentation required under A 2 of this section, as applicable. Should there be an increase in the closure costs, the owner or operator shall submit a new proof of financial responsibility as required by the Financial Assurance Regulations for Solid Waste Disposal, Transfer, and Treatment Facilities (9VAC20-70-10 et seq.).

7. **Loss of permit by rule status.** In the event that a facility operating under a permit by rule violates any applicable siting, design and construction, or closure provisions of 9VAC20-81-320, 9VAC20-81-330 or 9VAC20-81-360, respectively, the owner or operator of the facility will be considered to be operating an unpermitted facility as provided for in 9VAC20-81-45 and shall be required to either obtain a new permit as required by Part V (9VAC20-81-400 et seq.) or close under Part III (9VAC20-81-100 et seq.) or IV (9VAC20-81-300 et seq.) of this chapter, as applicable.

8. **Termination.** The director shall terminate a permit by rule and shall require closure of the facility whenever he finds that:

a. As a result of changes in key personnel, the requirements necessary for a permit by rule are no longer satisfied;

b. The applicant has knowingly or willfully misrepresented or failed to disclose a material fact in his disclosure statement, or any other report or certification required under this chapter, or has knowingly or willfully failed to notify the director of any material change to the information in the disclosure statement;

c. Any key personnel have been convicted of any of the crimes listed in §10.1-1409 of the Code of Virginia, punishable as felonies under the laws of the Commonwealth, or the equivalent of them under the laws of any other jurisdiction; or has been adjudged by an administrative agency or a court of competent jurisdiction to have violated the environmental protection laws of the United States, the Commonwealth or any other state and the director determines that such

conviction or adjudication is sufficiently probative of the permittee's inability or unwillingness to operate the facility in a lawful manner; or  
d. The operation of the facility is inconsistent with the facility's operations manual and/or the operational requirements of the regulations.