



Regulation 61-107.6

SWM: Solid Waste Processing Facilities

Effective Date June 23, 1995

Division of Mining & Solid Waste Management

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www.scdhec.gov

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PREAMBLE

The South Carolina Solid Waste Policy and Management Act (Act), Section 44-96-10 et seq., S.C. Code of Laws, 1976, as amended, requires the Department to promulgate regulations establishing procedures for solid waste processing facilities, including processing activities of unrecoverable solid waste at a Materials Recovery Facility. In 1993, to satisfy the requirements of the Act, the Department promulgated R.61-107.6 SWM: Solid Waste Processing Facilities. In 1995, the regulation was amended.

Regulation History

Promulgated pursuant to 1976 S.C. Code Section 44-96-10 et seq. as amended and originally published in S.C. State Register 17-5, effective May 28, 1993.

And last amended by Document No. 1801 in S.C. State Register 19-6, effective June 23, 1995.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61

Statutory Authority: 1976 Code
Sections 44-96-290, 44-96-300, 44-96-360,
44-96-400, 44-96-450, 44-96-460

R. 61-107.6. Solid Waste Management: Solid Waste Processing Facilities.

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A. Applicability.

1. This regulation establishes the procedures, documentation, and other requirements which must be met for the proper operation and management of all solid waste processing facilities, including the processing activities involving the unrecoverable solid waste at a Materials Recovery Facility. However, this regulation does not apply to Recovered Materials Processing Facilities.

2. Waste tire processing facilities and composting facilities shall comply with their respective regulations, unless otherwise specified by the Department.

3. Solid waste management facilities commonly referred to as "drop-off centers" or "convenience centers", designed for the receipt of solid waste, from personal, non-commercial vehicles, destined for delivery of such waste to another Solid Waste Management Facility (e.g. recycling, processing, treatment, disposal) will not be regulated as solid waste processing facilities.

4. Facilities processing solid waste generated in the course of normal operations on property under the same ownership or control as the solid waste processing facility are exempt from the requirements of this regulation.

B. Definitions.

1. "Applicant" means an individual, corporation, partnership, business association, or government entity that applies for the issuance, transfer, or modification of a permit under this regulation.

2. "Closure" means the discontinuance of operation by ceasing to accept, treat, store, or dispose of solid waste in a manner which minimizes the need for further maintenance and protects human health and the

environment.

3. "Contingency plan" means a document acceptable to the Department setting out an organized, planned, and coordinated course of action to be followed at or by the facility in case of a fire, explosions, or other incident that could threaten human health and safety or the environment.

4. "Department" means the South Carolina Department of Health and Environmental Control.

5. "Disclosure statement" means a sworn statement or affirmation, the form and content of which shall be determined by the Department as required by Code Section 44-96-300.

6. "Financial responsibility mechanism" means a mechanism designed to demonstrate that sufficient funds will be available to meet specific environmental protection needs of solid waste management facilities. Available financial responsibility mechanisms include, but are not limited to, insurance, trust funds, surety bonds, letters of credit, personal bonds, certificates of deposit, financial tests, and corporate guarantees as determined by the Department by regulation.

7. "Flood plain" means the lowland and relatively flat areas adjoining inland and coastal areas of the mainland and off-shore islands including, at a minimum, areas subject to a one percent or greater chance of flooding in any given year.

8. "Industrial solid waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under subtitle C of RCRA. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

9. "Leachate" means the liquid that has percolated through or drained from solid waste or other man-placed materials and that contains soluble, partially soluble, or miscible components removed from such waste.

10. "Materials recovery facility" means a solid waste management facility that provides for the extraction from solid waste of recoverable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials.

11. "Municipal solid waste" means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas), generated by commercial establishments (stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding industrial facilities) and nonhazardous sludge.

12. "Owner/Operator" means the person who owns the land on which a solid waste management facility is located or the person who is responsible for the overall operation of the facility, or both.

13. "Permit" means the process by which the Department can ensure cognizance of, as well as control over, the management of solid wastes.

14. "Person" means an individual, corporation, company, association, partnership, unit of local government, state agency, federal agency, or other legal entity.

15. "Recovered materials" means those materials which have known use, reuse, or recycling potential; can be feasibly used, reused, or recycled; and have been diverted or removed from the solid waste stream for sale, use, reuse, or recycling, whether or not requiring subsequent separation and processing, but does not include materials when recycled or transferred to a different site for recycling in an amount which does not equal at least seventy-five (75) percent by weight of materials received during the previous calendar year.

16. "Recovered materials processing facility" means a facility engaged solely in the recycling, storage, processing, and resale or reuse of recovered materials. The term does not include a solid waste handling facility; however, any solid waste generated by such facility is subject to all applicable laws and regulations relating to the solid waste.

17. "Solid waste" means any garbage, refuse, or sludge from a waste treatment facility, water supply plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities. This term does not include solid or dissolved material in domestic sewage, recovered materials, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to NPDES permits under the Federal Water Pollution Control Act, as amended, or the Pollution Control Act of South Carolina, as amended, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1964, as amended. Also excluded from this definition are application of fertilizer and animal manure during normal agricultural operations or refuse as defined and regulated pursuant to the South Carolina Mining Act, including processed mineral waste, which will not have a significant adverse impact on the environment.

18. "Solid waste handling facility" means any facility engaged in the handling of solid waste.

19. "Solid waste management facility" means any solid waste disposal area, volume reduction plant, transfer station, or other facility, the purpose of which is the storage, collection, transportation, treatment, utilization, processing, recycling, or disposal, or any combination thereof, of solid waste. The term does not include a recovered materials processing facility or facilities which use or ship recovered materials, except that portion of the facilities which is managing solid waste.

20. "Solid waste processing facility" means a combination of structures, machinery, or devices utilized to reduce or alter the volume, chemical, or physical characteristics of solid waste through processes, such as baling or shredding, prior to delivery of such waste to a recycling or resource recovery facility or to a solid waste treatment, storage, or disposal facility and excludes collection vehicles.

21. "Surface water" means lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within territorial limits, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private.

22. "Vector" means a carrier that is capable of transmitting a pathogen from one organism to another including, but not limited to, flies and other insects, rodents, birds, and vermin.

C. General Provisions.

1. The siting, design, construction, operation, closure, and post-closure activities of new or expanding solid waste processing facilities shall conform to the standards set forth in this regulation. The Department

may, on a case by case basis, allow variances to the siting, design, construction, operation, closure, and post-closure requirements found in this regulation, for wastes regulated under R.61-107.11 only.

2. Within six (6) months of the effective date of this regulation, all owners and/or operators of existing solid waste processing facilities shall submit, to the Department, as-built plans of the existing facility.

3. Within twelve (12) months of the effective date of this regulation, existing facilities which receive solid waste for processing shall be required to conform with these regulations, unless otherwise approved by the Department.

4. The Department shall require a disclosure statement from the permit applicant in accordance with Code Section 44-96-300. Local governments and regions comprised of local governments are exempt from this requirement. The Department may accept one (1) disclosure statement for multiple facility permit applicants.

5. A permit shall be required for each site or facility although the Department may include one (1) or more different types of facilities in a single permit if the facilities are collocated on the same site.

6. Waste tire processing facilities and composting facilities shall comply with their respective regulations, unless otherwise specified by the Department.

7. The permittee of a solid waste processing facility shall notify the Department prior to transfer of ownership or operation of the facility during its operating life or during the post-closure care period. The Department will approve a reissuance of the permit to the new owner provided that the facility is in compliance and the new owner agrees in writing to assume responsibility in accordance with these regulations.

D. Permit Application Requirements and Design Criteria.

1. Prior to construction, modification, or operation of a solid waste processing facility a permit shall be obtained from the Department. The application shall be signed by an engineer duly licensed and registered under the laws of the State of South Carolina.

2. Any person wishing to obtain a permit from the Department to operate a solid waste processing facility, shall submit to the Department three (3) copies of the following documents:

a. A completed permit application, on a form provided by the Department;

b. An engineering report which shall include the following:

(1) an overall description of the facility;

(2) a description of the process and equipment to be used;

(3) a description of the proposed service area;

(4) a description of the types and quantities of waste to be processed;

(5) a description of the existing site;

(6) a description of the security measures, including but not limited to fences, gates, signs; and,

- (7) the location of disposal or recycling facilities which will accept the processed waste;
- c. Complete construction plans and specifications that at a minimum address the following:
- (1) loading and unloading areas;
 - (2) access roads;
 - (3) processing areas;
 - (4) actual or calculated weight of all solid waste accepted at the facility;
 - (5) storage areas for incoming solid waste; and,
 - (6) a map showing the specific location, land use, and zoning within one-fourth (3) mile of the boundaries of the proposed facility;
- d. All tipping areas shall be located within an enclosed building or covered area and all waste shall be contained in the tipping area.
- e. A design report for the facility which shall provide the technical details and specifications necessary to support the design plans;
- f. A complete description of the personnel training program;
- g. An identification of possible air releases and groundwater and surface water discharges that may occur;
- h. A waste control plan describing the manner in which waste from the processing activities will be managed. The plan shall, at a minimum, address the following:
- (1) ensure that the facility processes only waste specifically authorized by the Department;
 - (2) provide a program to identify, control, separate out, record, and prevent waste not authorized by the Department to be processed at the facility from being accepted at the facility. The plan shall include a description of how these wastes will be handled and disposed if received at the facility and shall include provisions to notify the Department by inclusion in the annual monitoring report of the receipt and disposal of such wastes. No permit will be issued until a waste control plan has been approved by the Department; and,
 - (3) identify the facilities approved by the Department that will receive the processed waste and a certification that such facilities have adequate capacity to manage the processed waste;
- i. A quality assurance and quality control report. The facility owner or operator shall institute a control program (including measures such as signs, monitoring, alternate collection programs, passage of local laws, etc.) to assure that only solid waste authorized by the Department is being processed at the facility;
- j. A written contingency plan. This plan shall set forth operating procedures to be employed during periods of non-operation (e.g. equipment breakdown) which will require standby equipment, extension of operating hours, or diversion of solid waste to other facilities;
- k. A narrative description of the general operating plan for the facility, including the origin,

composition and weight or volume of solid waste that is to be processed at the facility, the process to be used at the facility, the daily operational methodology of the process, the loading rate, the proposed capacity of the facility and the expected life of the facility. The plan shall include a descriptive statement of any materials recycling or reclamation activities to be operated in conjunction with the facility on incoming solid waste. The plan shall describe how the facility will meet all applicable regulatory requirements;

l. An operation and maintenance manual describing how the facility shall be maintained and operated in accordance with the intended use of the facility. Equipment in use at the facility shall be maintained in good working order;

m. A detailed closure plan which shall identify the steps necessary to close the facility. The plan may be amended at any time during the active life of the facility with Department approval. The plan shall be amended whenever changes in operating plans or facility design affect the closure plan, or whenever there is a change in the expected year of closure;

n. A description and explanation of any restrictions the facility places on the materials it receives for processing; and,

o. A demonstration of financial responsibility. The owner or operator of each facility shall establish sufficient financial assurance to ensure satisfactory maintenance, closure, and post-closure of the facility; or to carry out any corrective action which may be required as a condition of a permit. Consideration shall be given to mechanisms which would provide flexibility to the owner or operator in meeting its financial obligations. The owner or operator shall be allowed to use combined financial responsibility mechanisms for a single facility and shall be allowed to use combined financial responsibility mechanisms for multiple facilities, utilizing actuarially sound risk-spreading techniques. Local governments are exempt from this requirement until such time as federal regulations require local governments or regions to demonstrate financial responsibilities for such facilities and the Department promulgates regulations addressing this issue.

E. Location Requirements.

Location requirements addressed in this section apply to all solid waste processing facilities, unless otherwise approved by the Department.

1. Solid waste processing facilities shall be adjacent to or have direct access to roads which are of all weather construction and capable of withstanding anticipated load limits.

2. Solid waste processing facilities located in 100-year floodplains shall demonstrate that the facility will not restrict the flow of the 100-year flood.

3. The active waste handling area of a solid waste processing facility shall not be located within two hundred (200) feet of any surface water, excluding drainage ditches and sedimentation ponds.

4. A solid waste processing facility shall not be located within any wetlands as delineated and defined specifically as wetlands according to the methodology accepted by the U. S. Army Corps of Engineers and the U. S. Environmental Protection Agency.

5. The active waste handling area of a solid waste processing facility, shall not extend closer than one hundred (100) feet to any drinking water well.

6. Locations shall allow for sufficient room to minimize traffic congestion and allow for safe operation.

7. No solid waste processing unit shall extend closer than one hundred (100) feet to any property line.
8. The active waste handling area of a solid waste processing facility, shall not extend closer than two hundred (200) feet to residences, schools, hospitals and recreational park areas.
9. Facilities shall adhere to all Federal, State, and local zoning, land use and other applicable local ordinances.

F. Operations Criteria.

A solid waste processing facility shall be designed and operated according to the minimum criteria listed in this section.

1. Access Controls. The operator shall restrict the presence of, and shall minimize the possibility of any unauthorized entry onto the facility site. A statement of the days and hours of operation shall be posted at the entrance of the facility and access, except for Department and/or emergency personnel, shall be limited to those times when authorized personnel are on duty.

2. Reporting and Record Keeping Requirements. All facilities shall:

a. Notify the Department's District Director, in the district in which the facility is located, if an unscheduled total facility shutdown exceeds twenty-four (24) hours;

b. Prepare and submit to the Department an annual report in a form provided by or acceptable to the Department by October 15, for the previous fiscal year; and,

c. Maintain a copy of all required reports at the facility for a period not less than five (5) years, and make these reports available to Department personnel upon request.

3. Receipt and Handling of Solid Waste.

a. The facility is authorized to process only solid waste specified by Department permit. The weight and/or volume of all solid waste processed at the facility shall be recorded and incorporated into the annual report.

b. All delivered solid waste shall be processed and contained at a facility designed in a way to minimize the effects of weather, wind, and precipitation. External storage of putrescible solid waste is prohibited. No putrescible waste shall remain at the site at the end of each working day unless it is stored in a manner to promote vector control. Solid waste identified as nonputrescible recyclables or oversized, bulky, or untreatable solid waste may be temporarily stored outside, on the premises for a period not to exceed one (1) week unless an extension is requested and approved by the Department. Any solid waste that is stockpiled or remains in storage shall be maintained so as to not create a nuisance or a sanitary or environmental problem. Litter, odors, rats, insects, flies, mosquitos, and other vectors shall be prevented and controlled at the facility.

c. The tipping areas shall be constructed of low permeability materials (e.g. concrete, asphalt), provided with a water supply for cleaning purposes, and equipped with drains, pumps, or equivalent means to facilitate the removal of water for proper disposal.

d. The transfer structures, buildings, and ramps shall be constructed of materials that can be easily

cleaned.

e. Leachate and washwater from a solid waste processing facility shall not be allowed to drain or discharge into waters of the State unless an effluent disposal permit (e.g. land application, or NPDES) is approved by the Department.

f. Solid waste processing facilities shall comply with all applicable Federal, State, and local air quality standards.

g. The processing facility shall arrange for delivery of any residual or other waste resulting from the processing to a disposal facility which is:

- (1) permitted by the Department if located in South Carolina; or,
- (2) permitted by the appropriate environmental regulatory agency if located in another state.

4. Process changes. The owner or operator shall receive approval from the Department in writing of all process changes before they are implemented. Process changes such as those made to increase the recovery of recyclable materials do not require approval. Permit modifications shall be required as deemed necessary by the Department.

5. Emergency preparedness. In addition to requirements set forth in the contingency plan, all processing facilities shall at a minimum:

- a. Provide adequate aisle space to allow for emergency equipment;
- b. Be equipped with the following:
 - (1) an internal communications system capable of providing immediate emergency instruction to facility personnel and an alarm system to notify facility personnel of an emergency condition;
 - (2) a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, and State or local emergency response teams;
 - (3) portable fire extinguishers, fire control equipment and spill control equipment; and,
 - (4) water available at adequate volume and pressure to supply water hose streams, automatic sprinklers, or water spray systems;
- c. Test and maintain as necessary to assure its proper operation, all facility emergency equipment including, but not limited to, communications or alarm systems, fire protection equipment, spill control equipment, and personal safety equipment;
- d. Provide immediate access for all personnel involved in the facility operation to an internal alarm or emergency communication device; and,
- e. Provide for an emergency coordinator.

6. Guidelines for identifying items or materials that may not be accepted for processing. The guidelines

shall ensure that the facility accepts and processes only waste specifically authorized by the Department to be processed at the facility.

7. Trained personnel shall be present at all times during the operation of the facility.

G. Monitoring and Reporting Requirements.

1. Should the Department confirm environmental and/or health problems associated with the facility, monitoring (including groundwater, surface water, and air quality monitoring and analyses, and product quality testing and analysis) may be required by the Department, as appropriate, and based on a case by case evaluation to ensure protection of the environment.

2. An annual report shall be submitted to the Department, by October 15, which includes at a minimum, the following information:

- a. Sources, type, and total quantity in weight and/or volume of waste received at the facility for the previous year;

- b. A description of the method and quantity of the distribution and/or disposal of the end product;

- c. A description of the method and quantity of the distribution and/or disposal of unauthorized waste received at the facility;

- d. The county in which the solid waste originated, or if the waste originated outside South Carolina, the county and the state; and,

- e. The transporters of waste.

3. Records of all monitoring and reporting information shall be maintained for a minimum of at least five (5) years from the sample or measurement date, unless otherwise specified by the Department.

H. Closure and Post-Closure Procedures.

1. Financial Assurance. Facilities shall fund a financial responsibility mechanism acceptable to the Department to ensure the satisfactory closure and post-closure care prior to accepting waste. A final closure cost estimate, based on third party costs to complete closure by disposing of the maximum quantity of material at a facility shall be calculated annually and adjusted annually, if necessary. Local governments are exempt from this requirement until such time as federal regulations require such local governments or regions to demonstrate financial responsibility for such facilities and the Department promulgates regulations addressing this issue.

2. Closure and Post-Closure Care Procedures. Closure and post-closure procedures addressed in this section apply to all solid waste processing facilities.

- a. At least sixty (60) days prior to closure, provide written notice of intent to close and a proposed closure date to the Department. The final quantity of solid waste shall be received no less than thirty (30) days prior to closure date.

- b. Upon closing, the owner or operator shall immediately remove all solid waste and post signs at the facility which state that the facility is no longer in operation.

c. Within thirty (30) days after receiving the final quantity of solid waste, the owner or operator shall remove all solid waste and shall remove or treat all waste residues, contaminated soils and equipment in accordance with the approved closure plan, and notify the Department upon completion.

d. After receiving notification that the facility closure is complete, the Department will conduct an inspection of the facility. If all procedures have been correctly completed, the Department will approve the closure in writing, at which time the Department permit shall be terminated.

e. If the owner or operator demonstrates that not all contaminated soils can be practicably removed or treated, to below applicable standards, as required in paragraph (b) of this section, then the owner or operator shall submit for Department approval, a post-closure care plan.

I. Personnel Training Requirements.

Solid waste processing facility personnel training programs shall, at a minimum:

1. [Reserved]
2. identify the positions which will require training and a knowledge of the procedures, equipment, and processes at the facility;
3. describe how facility personnel will be trained to perform their duties in a way that ensures the facility's compliance with the regulations, including the proper procedures that shall be followed in the processing and handling of solid waste not authorized by the Department to be received at the facility; and,
4. be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency and safety equipment, emergency procedures and emergency systems.

J. Corrective Action Requirements.

If at any time, the Department determines that the solid waste processing facility poses an actual or potential threat to human health or the environment, the owner or operator shall implement a corrective action program reviewed and approved by the Department.

K. Violations and Penalties.

A violation of this regulation or any permit, order, or standard subjects the person to the issuance of a Department order, or to civil enforcement action in accordance with Code Section 48-1-330, or 44-96-450. Willful violation of this regulation or any permit, order, or standard subjects the person to the issuance of a Department order, or to criminal enforcement action in accordance with Code Section 48-1-320, or 44-96-450. A person to whom an order is issued may appeal it as a contested case in accordance with R.61-72 and the Administrative Procedures Act.

L. Permit Review.

A permit issued pursuant to this regulation shall be effective for the design and operational life of the facility, to be determined by the Department. At least once every five (5) years, the Department will review the environmental compliance history of each permitted solid waste processing facility.

1. If, upon review, the Department finds that material or substantial violations of the permit demonstrate the permittee's disregard for, or inability to comply with applicable laws, regulations, or requirements and would make continuation of the permit not in the best interests of human health and safety or the environment, the Department may, after a hearing, amend or revoke the permit, as appropriate and necessary.

When a permit is reviewed, the Department shall include additional limitations, standards, or conditions when the technical limitations, standards, or regulations on which the original permit was based have been changed by statute or amended by regulation.

2. The Department may amend or attach conditions to a permit when:

a. There is a significant change in the manner and scope of operation which may require new or additional permit conditions or safeguards to protect human health and safety and the environment;

b. The investigation has shown the need for additional equipment, construction, procedures, and testing to ensure the protection of human health and safety and the environment; and,

c. The amendment is necessary to meet changes in applicable regulatory requirements.

M. Severability.

Should any section, paragraph, sentence, clause or phrase of this regulation be declared unconstitutional or invalid for any reason, the remainder of this regulation shall not be affected thereby.