Agency Name: Department of Health and Environmental Control

Statutory Authority: 2022 Act No. 119, Section 5, effective January 27, 2022

Document Number: 5191

Proposed in State Register Volume and Issue: 47/6

House Committee: Regulations and Administrative Procedures Committee

Senate Committee: Medical Affairs Committee

120 Day Review Expiration Date for Automatic Approval 05/08/2024

Final in State Register Volume and Issue: 48/5

Status: Final

Subject: Solid Waste Management Regulation (Solar Projects)

History: 5191

By Date Action Description Jt. Res. No. Expiration Date

- 06/23/2023 Proposed Reg Published in SR

- 01/09/2024 Received President of the Senate & Speaker 05/08/2024

H 01/09/2024 Referred to Committee

S 01/09/2024 Referred to Committee

H 04/17/2024 Committee Requested Withdrawal

120 Day Period Tolled

- 04/17/2024 Withdrawn and Resubmitted 05/08/2024

- 05/08/2024 Approved by: Expiration Date

- 05/24/2024 Effective Date unless otherwise

provided for in the Regulation

Document No. 5191

**DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**

CHAPTER 61

Statutory Authority: 2022 Act No. 119, Section 5, effective January 27, 2022

61‑107.20. Solar Energy Systems. (New)

**Synopsis**:

Pursuant to 2022 Act No. 119, Section 5, the Department of Health and Environmental Control (Department) is directed to develop rules to guide all South Carolinians invested in, selling, installing, and using photovoltaic (PV) modules and energy storage system batteries in the management of end‑of‑life PV modules and energy storage system batteries on solar projects, and the decommissioning of solar projects in excess of thirteen acres. The Department proposes new regulation R.61‑107.20, Solar Energy Systems, to create basic guidelines for large solar energy systems. The new regulation is designed to establish a registration requirement and facilitate all large solar energy systems have a decommissioning plan, which includes financial assurance, removal of PV modules and accompanying equipment, and remediation of the land, if necessary. The Administrative Procedures Act, S.C. Code Section 1‑23‑120(A), requires General Assembly review of this proposed new regulation.

The Department had a Notice of Drafting published in the March 24, 2023, South Carolina State Register.

Section‑by‑Section Discussion of New Regulation

|  |  |  |
| --- | --- | --- |
| **Section** | **Type of Change** | **Purpose** |
| Regulation Number, Regulation Title, and Statutory Authority | Addition | Assigns a regulation number and title and establishes the Department’s statutory authority. |
| Table of Contents | Addition | Gives an overview of the contents and organization of the regulation. |
| A. Applicability | Addition | Lays out the pertinent activities by providing guidance, rules, and requirements for compliance with this regulation. |
| B. Definitions | Addition | Defines the terms used throughout the regulation and presents the terms in alphabetical order. |
| C. General Provisions | Addition | Describes the general requirements that apply to all large solar energy systems. |
| D. Registration | Addition | Describes the registration requirements that apply to all large solar energy systems. |
| E. Decommissioning Requirements | Addition | Describes requirements for a facility’s decommissioning of a large solar energy system after certain conditions are met. |
| F. Financial Assurance | Addition | Describes the minimum financial assurance standards for compliance with Section E. |
| G. Severability | Addition | Protects the remaining portion of the regulation should any part or language be found invalid. |
| H. Violations and Penalties | Addition | Establishes the penalties for violation of this regulation, or any permit, order, or standard issued pursuant to the regulation. |

**Instructions:**

Add R.61‑107.20, Solar Energy Systems, as written below to the S.C. Code of Regulations.

**Text:**

61‑107.20. Solar Energy Systems.

Statutory Authority: Section 5 of Act 119 of 2022

Table of Contents

A. Applicability

B. Definitions

C. General Provisions

D. Registration Requirements

E. Decommissioning Requirements

F. Financial Assurance

G. Severability

H. Violations and Penalties

A. Applicability.

1. This regulation establishes procedures, documentation, and other requirements which must be met to operate large solar energy systems.

2. The requirements of this regulation are not applicable to rooftop solar energy systems or any other solar energy system that does not meet the definition of a large solar energy system.

3. The requirements of this regulation do not supersede or amend R.61‑79, Hazardous Waste Management Regulations, or any other applicable laws, statutes, rules, and regulations.

4. The requirements of this regulation do not supersede or amend R.61‑107, Solid Waste Management Regulations, or any other applicable laws, statutes, rules, and regulations.

B. Definitions.

1. “Decommission” means the removal and proper disposal of solar energy equipment, facilities, or devices located on real property utilized by or in a large solar energy system. “Decommission” includes the reasonable restoration of the property upon which such solar equipment, facilities, or devices are located, including, but not limited to:

a. soil stabilization; and

b. revegetation of the ground cover of the real property disturbed by the installation of such equipment, facilities, or devices.

2. “Department” means the South Carolina Department of Health and Environmental Control.

3. “End‑of‑life solar panel” means, for the purpose of this regulation, any solar panel, solar energy equipment or other materials that is no longer suitable for its original intended purpose because of wear, damage, or defect.

4. “Existing large solar energy system (system)” means a large solar energy system installed prior to promulgation of this regulation. The system is considered installed if: onsite physical construction has begun, or the owner or operator has entered into contractual obligations for the installation of the system.

5. “Financial assurance mechanism” means, for the purpose of this regulation, a mechanism designed to demonstrate that sufficient funds will be available to meet specific environmental protection needs of a large solar energy system. Available financial assurance mechanisms include cash, insurance, trust funds, surety bonds, letters of credit, certificates of deposit, and financial tests as determined by the Department, per regulation.

6. "Generation" means the act or process of producing waste materials.

7. “Ground‑mounted solar energy systems” means a solar energy system that is structurally mounted to the ground.

8. “Hazardous waste” is defined in Section 44‑56‑20 of the South Carolina Hazardous Waste Management Act and is applicable to this regulation.

9. “Landowner” means a person or corporation who has assumed legal ownership of the property upon which a solar energy system is constructed.

10. “Large solar energy system” means a ground‑mounted solar energy system that occupies in excess of thirteen (13) acres.

11. “Operator” means the person or corporation responsible for the overall operation of a solar energy system.

12. “Owner” means the person or corporation who has assumed legal ownership of the solar energy system through the provisions of a contract or other legally binding transfer of ownership.

13. “Person” means an individual, business entity, partnership, limited liability company, corporation, not‑for‑profit corporation, association, public benefit corporation, or public authority.

14. “Photovoltaic device” means a device that generates electricity directly from sunlight via an electronic process that occurs naturally in certain types of material, such as semiconductors.

15. “Reasonably restored” means to place a solar energy system back into its original state or in accordance with any other applicable contract between the owner and landowner.

16. “Rooftop solar energy system” means a solar energy system that is structurally mounted to the roof of a house, building, or other structure and does not qualify as a large solar energy system.

17. “Solar energy equipment” means electrical material, hardware, inverters, conduit, storage devices, footings, braces, stands or any other equipment to any electric grid equipment associated with the operation of a solar energy system.

18. “Solar energy system” means components and subsystems required to convert solar energy into electric energy suitable for use. The term includes, but is not limited to, solar panels and solar energy equipment. The area of a solar energy system includes all the land inside the perimeter of the solar energy system, which extends to any interconnection equipment.

19. “Solar panel” means a photovoltaic device capable of collecting and converting solar energy into electricity.

20. Solid waste” is defined in Section 44‑96‑40 of the South Carolina Solid Waste Policy and Management Act and is applicable to this regulation.

C. General Provisions.

1. Large solar energy systems shall comply with all federal, state, and local zoning, land use, and other applicable ordinances which include, but are not limited to, financial assurance requirements from local governments.

2. All solid waste and hazardous waste generated within the operation, routine or unexpected maintenance, or decommissioning of a large solar energy system’s operation shall be managed according to all applicable laws, statutes, rules, and regulations.

D. Registration Requirements.

1. Persons intending to operate a new large solar energy system shall submit a completed registration, prior to operation, via a form provided by the Department. The registration includes the following information:

a. Name of the large solar energy system;

b. Address and tax map ID number of the property upon which the large solar energy system will be located;

c. Landowner information which includes name, address, and contact information;

d. Owner information which includes name, address, and contact information;

e. Operator information which includes name, address, contact information;

f. Number of photovoltaic modules;

g. Number of energy storage system batteries;

h. Projected date of decommissioning; and

i. Signed agreement between owner and landowner, which confirms the plan for land restoration after decommissioning.

2. Existing large solar energy systems operating before the effective date of this regulation shall have one hundred eighty (180) calendar days from the regulation’s effective date to comply with the provisions of this regulation.

3. Registrations shall be updated every five (5) years from the registration submission date, or with a transfer of ownership, until the site is completely decommissioned.

E. Decommissioning Requirements.

1. Five (5) years prior to a large solar energy system’s projected end‑of‑life, the registrant shall submit to the Department a decommissioning plan for review and approval. The decommissioning plan shall be updated if any changes occur at the facility that require a deviation from the approved decommissioning plan, which includes the cost estimate.

2. Following a continuous twelve (12) month period in which no electricity is generated, the registered owner/operator will have twelve (12) months to complete decommissioning of the large solar energy system, unless otherwise approved by the Department.

3. Decommissioning shall be considered complete once all components of a large solar energy system are removed and properly disposed of, or the property upon which such solar equipment, facilities, or devices are located have been reasonably restored.

4. The decommissioning plan shall include:

a. A description of the large solar energy system that includes:

(1) Total property acreage,

(2) Total acreage used for solar panels and accessory equipment,

(3) The proposed number of solar panels for decommissioning, and

(4) A list of all components of the solar energy system to be properly recycled or disposed of in accordance with the decommissioning plan.

b. A statement of the objective of the decommissioning process. An example of an objective can be the following: to reasonably restore the site to its prior use or to a different use as approved by the owner and landowner;

c. The estimated timeframe it will take to complete the decommissioning process;

d. A description of the tasks involved in decommissioning and the types of equipment that will be required;

e. The registrant shall provide a detailed final decommissioning estimate of the cost of recycling or disposing of all components of the solar energy system, including, but not limited to, solar panels, electrical material, hardware, inverters, conduits, storage devices, footings, braces, stands, or any other appurtenances associated with the operation of a solar energy system. A final decommissioning cost estimate shall provide estimates for third‑party costs to properly recycle or dispose of all components of the solar energy system and perform any post‑closure care. If applicable, a salvage plan may be included to support proposed salvage values.

f. A financial assurance mechanism that will be used to meet the requirements of the cost estimate.

5. The owner or operator of the large solar energy system shall send a notification to the Department no later than thirty (30) calendar days after the completion of decommissioning.

F. Financial Assurance.

1. Once the Department has approved the decommissioning cost estimate, a financial assurance mechanism payable to the Department shall be submitted to the Department for review and approval.

a. A large solar energy system can satisfy the requirements of this section by submitting proof of compliance with financial assurance requirements from the municipal or local government in which the large solar energy system is located.

b. If the municipal or local government submittal is less than the Department‑approved decommissioning cost estimate, the Department will require a greater amount to satisfy the financial assurance requirement.

2. Local governments may also establish or retain financial assurance ordinances that are more stringent than the statewide minimum standards.

3. The mechanism shall be adequate to ensure the satisfactory decommissioning of the large solar energy system and post‑closure care as required by this regulation in Section E(4).

4. During the remaining operational life of the large solar energy system, the facility owner/operator shall adjust the decommissioning cost estimate as needed for inflation.

a. The large solar energy system owner/operator may update the financial assurance mechanism as needed to account for salvage value.

b. At any time during its period of operation, the large solar energy system owner/operator shall increase the decommissioning cost estimate and the amount of financial assurance provided if changes to the decommissioning plan or facility conditions increase the maximum cost of decommissioning.

c. At any time during its period of operation, the large solar energy system owner/operator may reduce the amount of financial assurance provided for proper closure if the approved decommissioning cost estimate exceeds the maximum cost of decommissioning. Prior to reducing the amount of financial assurance, the justification for the reduction of the decommissioning cost estimate shall be submitted to the Department for review and approval. Provided the new cost estimate is approved, the owner/operator may then reduce the amount of financial assurance secured.

5. The financial assurance mechanism shall consist of one or more of the following mechanisms: cash, insurance, trust funds, surety bonds, letters of credit, certificates of deposit, and financial tests as determined by the Department per regulation.

6. The mechanism used to demonstrate financial assurance under this section shall ensure that the funds necessary to meet the costs of closure and corrective action for known releases will be available whenever needed. The owner/operator shall provide continuous coverage for corrective action and decommissioning until released from financial assurance requirements by the Department.

7. The Department may take possession of a financial assurance mechanism for failure to complete decommissioning, to complete post‑closure care, or to renew or provide alternate acceptable financial assurance.

8. The requirements of this Section apply to all large solar energy systems except those owned and operated by local government, a region comprised of local governments, or state or federal government entities whose debts and liabilities are the debts and liabilities of the state or the United States.

G. 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.

H. Violations and Penalties.

1. The Department may impose reasonable civil penalties on a large solar energy system for each day of violation of the provisions of this regulation, including violation of any Department order or standard.

**Fiscal Impact Statement:**

The requirements of this regulation would cause a cost assessment to the State General Fund. Staff anticipates there will be no cost to the Department to implement the directives of the Act and this proposed regulation. There are no fees established by the Act and this proposed regulation. Additional costs to state government are unanticipated.

**Statement of Need and Reasonableness:**

The following presents an analysis of the factors listed in 1976 Code Sections 1‑23115(C)(1)‑(3) and (9)‑(11):

DESCRIPTION OF REGULATION: New Solid Waste Management Regulation, Solar Energy Systems.

Purpose: The purpose of this new regulation is to comply with the requirements of 2022 Act No. 119, Section 5, which directs the Department to develop rules for solar projects in excess of thirteen acres. The new regulation is designed to establish a registration requirement for large solar sites and facilitate that all large solar energy systems have a decommissioning plan, which includes financial assurance, removal of PV modules and accompanying equipment, and remediation of the land, if necessary.

Legal Authority: 2022 Act No. 119, Section 5, effective January 27, 2022.

Plan for Implementation: The new regulation will take legal effect upon General Assembly approval and upon publication in the State Register. Department personnel will then take appropriate steps to inform the regulated community of the new regulation. Additionally, a copy of the regulation will be posted on the Department’s website, accessible at [www.scdhec.gov/regulations‑table](http://www.scdhec.gov/regulations-table). Printed copies may also be requested, for a fee, from the Department’s Freedom of Information Office.

DETERMINATION OF NEED AND REASONABLENESS OF THE REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

In 2022, the General Assembly passed Act No. 119, which in Section 5 instructs the Department to prepare regulations for the management of end‑of‑life PV modules and energy storage system batteries on solar projects in excess of thirteen acres. The Department proposes new regulation R.61‑107.20, Solar Energy Systems, to establish basic requirements for large solar energy systems. This proposed regulation would require the Department to oversee a registration process for those who qualify as large solar energy systems, as well as the decommissioning of these sites at their end‑of‑life. This regulation is needed to comply with the requirements of 2022 Act No. 119 and will give the Department a basic framework with which to manage large solar energy systems and facilitate local approval for such sites.

DETERMINATION OF COSTS AND BENEFITS:

Internal costs: Implementation of this proposed regulation will not require additional resources beyond those allowed for by Act 119. The Department estimates that there are 78 current facilities that would need oversight under this regulation. This proposed regulation would require the Department to oversee a registration process for large solar energy systems as well as the decommissioning of these sites at their end‑of‑life. The Act does not establish a fee that would fund the implementation of this regulation.

External costs: There will be a cost for facilities that qualify as large solar energy systems. Costs include complying with registration requirements and decommissioning requirements that require these facilities to remove all solar panels and accompanying equipment, which includes providing a financial assurance mechanism to the Department. There are no registration or operating fees in this proposed regulation.

External benefits: With the state participating in oversight of large solar energy systems, there will be less of a burden on local government resources to manage such sites. It will benefit the residents of South Carolina as this proposed regulation assists in facilitating the proper disposal of solar panels at the end of their useful life.

UNCERTAINTIES OF ESTIMATES:

There are no uncertainties of estimates relative to the costs to the state or its political subdivisions.

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH:

This proposed new regulation will provide rules to facilitate the proper disposal of end‑of‑life large solar energy systems.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED:

If this proposed new regulation does not become effective, the rules for large solar energy systems required by 2022 Act No. 119, Section 5 will not be implemented. The Department will not have any regulatory framework to manage the creation and operation of large solar energy systems.

**Statement of Rationale:**

Here below is the Statement of Rationale pursuant to S.C. Code Section 1‑23‑110(A)(3)(h):

The requirements of 2022 Act No. 119, Section 5, directs the Department to develop regulations to guide all South Carolinians invested in, selling, installing, and using photovoltaic (“PV”) modules and energy storage system batteries in the management of end‑of‑life PV modules and energy storage system batteries on solar projects, and the decommissioning of solar projects in excess of thirteen acres. R.61‑107.20, Solar Energy Systems, will establish basic oversight rules over large solar energy systems, including a registration requirement, and a requirement for a decommissioning plan, which includes financial assurance, removal of PV modules and accompanying equipment, and remediation of the land, if necessary. This new regulation will allow the Department to have knowledge of existing facilities and establishes a framework with which to manage end‑of‑life PV modules and energy storage system batteries.