Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
DEPARTMENT OF ENERGY RESOURCES

SMALL CLEAN ENERGY INFRASTRUCTURE FACILITY SITING & PERMITTING (225 CMR 29.00)

DRAFT GUIDELINE

Guideline on Public Health, Safety, Environmental, and Other Standards

Effective Date: March xx, 2026

Background and Purpose

The purpose of this Guideline on Public Health, Safety, Environmental, and Other Standards ("Baseline Standards") is to define the standards applicable to a Consolidated Local Permit pursuant to 225 CMR 29.06, or Constructive Approval pursuant to 225 CMR 29.12. The Applicant is required to consult the Baseline Standards in preparing its Consolidated Local Permit Application, based on the type of Small Clean Energy Infrastructure Facilities (SCEIF) Project.

The Baseline Standards apply throughout the design, construction, operation, maintenance, and decommissioning of a SCEIF. This guideline is organized by standards that apply to all SCEIFs and those that apply only to specific types of SCEIFs. The Department emphasizes that the Baseline Standards below do not constitute an exhaustive listing of all relevant health, safety, environmental and other standards that could be applicable to a SCEIF. Rather, the Baseline Standards reflect the key provisions that the Department is highlighting.

In the event of a Constructive Approval, pursuant to 225 CMR 29.12 and 980 CMR 17.00, the Constructive Approval Permit would incorporate by reference the applicable Baseline Standards in effect at the time of the approval, which include the standards that apply to all Clean Energy Infrastructure Facilities (CEIF) (section I, below), and the additional Baseline Standards that apply to the specific type of CEIF proposed (sections II – VII below).

1. Standards that Apply to All Small Clean Energy Infrastructure Facilities:

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Topic	**Proposed Standard**
Aboveground Storage Tanks (More than 10K Gallons)	Pursuant to 527 CMR 9.00 and 502 CMR 5.00, SCEIFs shall follow the uniform requirement and procedures for the construction, maintenance, and use of aboveground storage tanks with a gross capacity of more than 10,000 gallons used for storage of any fluid other than water.
Aboveground Storage Tanks	Pursuant to 527 CMR 9.00, SCEIFs shall follow the uniform design, installation, testing, and maintenance of underground and aboveground

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Topic	**Proposed Standard**
(Less than 10K Gallons)	storage tanks and containers with a capacity of less than 10,000 gallons used for storage of any fluid other than water.
Air Pollution	Pursuant to 310 CMR 7.00, SCEIFs shall prevent the occurrence of conditions of air pollution, including, but not limited to noise, where such do not exist and facilitate the abatement of conditions of air pollution where and when such occur. SCEIFs shall be designed to attain, preserve, and conserve the highest possible quality of the ambient air compatible with needs of society.
Archeological Resources	Pursuant to 950 CMR 70.00, SCEIFs shall comply with the "Antiquities Act," M.G.L. c. 9, §§ 26 through 27C.
Areas of Critical Environmental Concern	Pursuant to 301 CMR 12.00, SCEIFs shall avoid, minimize and mitigate areas within the Commonwealth that are designated Areas of Critical Environmental Concern (ACEC), in which unique clusters of natural and cultural resources exist and warrant a high level of concern and protection.
Article 97 Land Disposition	Article 97 of the Articles of Amendment to the Constitution of the Commonwealth of Massachusetts, and the Public Lands Preservation Act, codified at M.G.L. c. 3, § 5A, protect state and municipal lands acquired for natural resource, conservation, and recreation purposes and establish provisions that limit changing the use or disposition of Article 97 lands. The SCIEF shall follow all requirements and applicable policies pertaining to Article 97 lands.
Asbestos	Pursuant to 454 CMR 28.00, and 310 CMR 7.15, SCEIFs shall follow the requirements necessary to protect the health and safety of workers and the general public associated with the repair, removal, enclosure, encapsulation or disturbance of asbestos or asbestos-containing material.
Aviation Hazards	SCEIF design shall comply with Federal Aviation Administration standards of 14 CFR Part 77 and FAA Advisory Circular 70/7460-1, Obstruction Marking and Lighting, where applicable.
Benefits	SCEIFs may establish co-benefits of projects such as shared use recreational paths or access to nature that leverage investments required to provide the intended primary energy benefits of the project, noting that potential co-benefits should avoid unintended impacts to natural resources.
Building Code	SCEIFs shall be designed and constructed in accordance with the provisions of the Massachusetts State Building Code 780 CMR.
Chapter 91 (Trust Lands)	SCEIFs shall comply with 310 CMR 9.00 to preserve and protect the public's interest in tidelands, Great Ponds, and non-tidal rivers and streams in accordance with the public trust doctrine, and M.G.L. c. 91.
Coastal Zone Management (CZM)	Pursuant to 301 CMR 20.00, SCEIFs shall comply with the requirements of the Coastal Zone Management Program for projects in, or affecting, a coastal zone for which compliance with Coastal Program

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Topic	**Proposed Standard**
	Policies is authorized, as overseen by the Massachusetts Office of Coastal Zone Management.
Cybersecurity	SCEIFs shall comply with applicable cybersecurity standards established by the U.S. Department of Commerce's National Institute of Standards and Technology, the North American Electric Reliability Corporation, or the International Organization for Standardization.
Decommissioning/ Abandonment	Prior to construction, the SCEIF owner shall provide to the Local Government, in cash, bond, letter of credit, escrow, or another form reasonably acceptable to the Local Government, a surety to cover the cost of removal in the event the Local Government must remove the SCEIF Installation and remediate the landscape. The amount of the surety shall be 125% of a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer and labor rates outlined by the Massachusetts Department of Labor Standard's Prevailing Wage Program and shall account for increased costs due to inflation at a rate of 2.5 percent per year. The Local Government shall reserve the right to have the decommissioning plan reviewed by a third-party engineer at cost to the SCEIF owner. The SCEIF owner shall provide an updated estimate after ten years of project operation and subsequent updates in five-year intervals after that date, for the remainder of the project's lifetime. If the updated estimate exceeds the balance of the surety, the SCEIF owner shall provide additional surety in the amount of 125% of the most recent estimated cost of decommissioning. This surety will not be required for municipally or state-owned facilities. In the absence of a proposed date of decommissioning or written notice of extenuating circumstances, a SCEIF shall be considered abandoned when it ceases to operate, meaning the SCEIF is not performing the normal functions associated with the SCEIF and its equipment on a continuous and ongoing basis, for more than 12 months, without written consent of the Local Government. The Local Government shall provide written notification of abandonment to the SCEIF's owner and operator. Decommissioning shall include removal of all structures, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated components and facilities. If the SCEIF was built upon agricultural soils, the site should be restored to its predevelopment condition. Disturbed earth shall be graded and re-seeded as necessary to minimize erosion unless the landowner requests in writing that the access roads or other land surface areas not be restored. Hazardous material from the SCEIF shall be disposed of in

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Topic	**Proposed Standard**
	accordance with federal, state, and local law. The decommissioning plan shall also utilize best recycling practices to the maximum feasible extent.
Electrical Code	SCEIF electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of 527 CMR 12.00: Massachusetts Electrical Code.
Excavation and Trench Safety	SCEIFs shall follow the excavation and trench safety standards established by 520 CMR 14.00.
Emergency Response Plan	The Applicant shall create an emergency response plan ("ERP") that: (1) is developed in consultation with local public safety officials; and (2) requires close coordination between the developer and first responders to ensure that first responders are fully informed about emergency events and understand how to address such events without assuming unnecessary personal risk. The ERP shall include: (1) equipment types and layouts without compromising Critical Energy/Electric Infrastructure Information; (2) safety data sheets for materials used or stored onsite; (3) a firefighting plan with suggested response procedures for various emergency conditions; and (4) the emergency response tasks that will be undertaken and completed by the operator of the facility/facilities. The ERP shall be developed in consultation with and approved by the appropriate Local Government board or department. Please see below for additional requirements for ERPs for Clean Energy Storage Facilities.
Fire Code	SCEIFs shall be designed and constructed in accordance with the provisions of the Massachusetts Comprehensive Fire Safety Code 527 CMR 1.00. BESS must also meet fire safety standards listed below.
Hazardous Waste	Pursuant to 310 CMR 30.000, SCEIFs shall protect public health, safety, and welfare, and the environment, by comprehensively managing the generation, storage, collection, transport, treatment, disposal, use, reuse, and recycling of hazardous waste in Massachusetts.
Herbicides Use in Rights-of-Way	SCEIFs shall follow 333 CMR 11.00 to minimize the uses of, and potential impacts from herbicides in rights-of-way on human health and the environment while allowing for the benefits to public safety provided by the selective use of herbicides.

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Topic	**Proposed Standard**
Herbicide/Pesticide Application	The Applicant shall ensure that any herbicide or pesticide application is approved by Massachusetts Department of Agricultural Resources and complies with M.G.L. c. 132B and local regulations.
Historic Places	SCEIFs must comply with all applicable provisions of 950 CMR 71.00.
Lighting	SCEIFs' Exterior lighting design shall be limited to lighting required for health, safety, security, emergencies, and operational purposes, and shall be designed and installed in a way as that avoids off-site lighting effects.
Massachusetts Endangered Species Act	Pursuant to Chapter 131A and its implementing regulations, 321 CMR 10.00, SCEIFs shall protect the Commonwealth's Endangered, Threatened, and Special Concern species and their habitats.
Massachusetts Water Resources Authority 8(M) Permit	Pursuant to St. 1984, c. 372, § 8(m), SCEIFs that need to build, construct, excavate or cross within or near a Massachusetts Water Resource Authority ("MWRA") easement or property are required to seek a § 8(m) permit to protect MWRA infrastructure and avoid accidents.
Noise	SCEIFs shall comply with local noise bylaws, regulations, or ordinances. SCEIFs shall also comply with 310 CMR 7.10. A source of sound violates 310 CMR 7.10 if the source either increases the broadband sound level by more than 10 decibels above ambient or produces a "pure tone" condition. A pure tone condition occurs when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by 3 decibels or more. These criteria are measured both at the property line and at the nearest inhabited residences or other sensitive receptors. SCEIF may implement a sound suppression or mitigation measures to achieve desired sound levels.
Paving Restoration	All SCEIF owners shall comply with any requirements for restoring municipal street surfaces after performing excavations if applicable. Public utility companies shall also comply with requirements for restoring municipal street surfaces after performing excavations pursuant to D.T.E. 98-22.
Pollinator Friendly Practices	Facilities shall limit clearing of natural vegetation, including mowing, to what is necessary for the construction, operation, and maintenance of the SCEIF. Any vegetative cover on the SCEIF's site shall be maintained to prevent soil erosion and plantings shall be native species appropriate to the geographical area, consistent with *The Vascular Plants of Massachusetts: A County Checklist provided by the Massachusetts Natural Heritage and Endangered Species Program.* Vegetive cover may be located within the setback area. Installation of ground-mounted solar facilities shall meet the criteria for a silver pollinator certificate, as described by the UMass Clean Energy Extension Pollinator Friendly Solar PV Certification Program.

SCEIF -- All Facilities	
Topic	**Proposed Standard**
"Right to Know" (Hazardous Substances)	Pursuant to 454 CMR 21.00, SCEIFs shall follow standards and requirements to protect the health and safety of employees through communication of information regarding use of toxic or hazardous substances.
Section 401 Water Quality Certifications	SCEIFs that require a federal permit or license for a discharge to Waters of the United States within the Commonwealth shall request certification from MassDEP pursuant to Section 401 of the federal Clean Water Act, 33 U.S.C. 1341, and shall design their projects so as to comply with 314 CMR 4.00 and all applicable requirements of federal law. Any projects that involve a discharge of dredged or fill material, dredging or dredged material disposal shall meet the applicable requirements of 314 CMR 9.00.
Site Suitability Guidance	Facilities subject to Site Suitability Guidance, as established by the Executive Office of Energy and Environmental Affairs, pursuant to M.G.L. c. 21A, § 30, shall follow said Guidance.
Solid Waste Facilities	SCEIFs shall follow the requirements for siting, construction, operation, closure and post-closure as applicable to facilities managing solid waste or conducting an activity on a permitted solid waste facility, in compliance with 310 CMR 16.00 and 310 CMR 19.00.
Stormwater Management	SCEIFs shall be constructed to minimize runoff and shall be managed in accordance with the requirements of the Wetlands Regulations, 310 CMR 10.00, the 401 Water Quality Certification for Discharge of Dredged or Fill Material, Dredging, and Dredged Material Disposal in Waters of the United States Within the Commonwealth Regulations, 314 CMR 9.00, the Massachusetts Stormwater Handbook, the NPDES Construction General Permit, and the Multi-Sector General Permit, where applicable.
Surface Water Quality Standards	Pursuant to 314 CMR 4.00, SCEIFs shall follow the requirements to protect public health and enhance the quality and value of the water resources of the Commonwealth, including, where appropriate, the prohibition of discharges.
Transmission Line Installation and Maintenance	Facilities with electric transmission lines over 50 kV as measured in alternating current shall comply with the safety provisions for the installation and maintenance of electric transmission lines in 220 CMR 125.00.
Landscaping	The Applicant shall preserve natural vegetation to the maximum extent possible. This may include blending in equipment with the surroundings, adding vegetative buffers to provide an effective visual barrier from adjacent roads and driveways, and screening abutting residential dwellings.
Waste	The Applicant shall comply with the Waste Site Clean Up procedures of 310 CMR 40.00, and all other applicable regulations.

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Topic	**Proposed Standard**
Wellhead Protection	Pursuant to 310 CMR 22.00, SCEIFs are prohibited in Zone I areas, unless directly related to the provision of the public water system or if the public water system has demonstrated to MassDEP's satisfaction that the SCEIF will have no significant impact on water quality. SCEIFs in Zone II areas, or Zone A areas, must comply with local wellhead and surface water protection and non-zoning controls and prohibitions required by MassDEP pursuant to 310 CMR 22.00.
Wetlands Protection	Facilities in jurisdictional Wetlands Resource Areas and corresponding buffer zones shall comply with the Wetlands Protection Act (WPA"), M.G.L. c. 131, § 40, and the requirements of the WPA regulations at 310 CMR 10.00. Facilities shall follow Local Government wetlands protection bylaws SCEIFs shall ensure that projects are consistent with the requirements of any relevant wetlands restriction order(s) recorded pursuant to 310 CMR 12.00 or 13.00.
Operations and Maintenance Plan	Prior to commercial operation, the Applicant shall submit to the Local Government a plan for the operation and maintenance of the SCEIF concurrently with the submission of the Building Permit Application. That plan shall include measures for maintaining safe access to the SCEIF, stormwater management control, and general procedures for operational maintenance of the SCEIF. The Applicant shall maintain the SCEIF in good condition. Maintenance shall also include, but not be limited to, painting structures, structural repairs, and integrity of security measures.

2. Additional Standards that Apply to Small Clean Energy Infrastructure Facilities (SCEIF), Except for Small Clean Transmission and Distribution Infrastructure Facilities (SCTDIF)

CEIF – Except SCTDIF	
Topic	**Proposed Standard**
Slope	Buildable areas for SCEIF may not exceed a slope of 15 degrees.

3. Additional Standards that Apply Only to Small Clean Energy Storage Facilities

Small Clean Energy Storage Facilities Only	
Topic	**Proposed Standard**
Electrical	SCEIF shall be listed by a Nationally Recognized Testing Laboratory to UL 9540 (Standard for Energy Storage Systems and Equipment) or approved equivalent, with subcomponents meeting each of the following standards as applicable:

Small Clean Energy Storage Facilities Only	
Topic	**Proposed Standard**
	1) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications); 2) UL 1642 (Standard for Lithium Batteries); 3) UL 1741 or UL 62109 (Inverters and Power Converters); 4) Certified under the applicable electrical, building, and fire prevention codes as required. Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 (or approved equivalent) and applicable codes, regulations and safety standards may be used to meet system certification requirements. Pursuant to 527 CMR 12.00, Small Clean Energy Storage Facilities shall clearly display disconnect and other emergency shutoff information on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
Fire Safety	Small Clean Energy Storage Facilities shall be designed, constructed, and operated in accordance with National Fire Protection Association (NFPA) 855: Standard for the Installation of Energy Storage Systems, as well as the latest edition of the Massachusetts State Fire Code. This includes emergency operations plan and emergency training for facility staff, smoke detection systems, fire control and suppression system, explosion control and spill response measures. Small Clean Energy Storage Facilities shall be designed to meet UL 9540A fire testing and thermal runaway propagation risk test methods for cell level, module level, unit level, and installation level. Small Clean Energy Storage Facilities, components, and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70. Facilities shall follow NFPA 855-recommended use of water as the primary fire suppression agent for lithium-ion battery fires, unless alternative fire protection strategies or agents are proven effective, and approved by the Authority Having Jurisdiction (AHJ). NFPA 855 requires an adequate water supply and firewater containment strategies for both manual and automatic fire suppression using water as the cooling agent.

Small Clean Energy Storage Facilities Only	
Topic	**Proposed Standard**
Setbacks	Small Clean Energy Storage Facilities shall be set back from other structures, tree lines, and other combustible materials, as recommended in NFPA 855 and the Massachusetts State Fire Code.
Signage	Signage for Small Clean Energy Storage Facilities shall comply with ANSI Z535 and shall include the type of technology associated with the BESS, any special hazards associated, the type of suppression system installed in the area of BESS, and 24-hour emergency contact information, including reach-back phone number.
Emergency Response	In addition to following the requirements listed under "Emergency Response" for all SCEIF, Emergency Response Plans for Small Clean Energy Storage Facilities shall include the following information: 1. Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions; 2. Procedures for inspection and testing of associated alarms, interlocks, and controls; 3. Procedures in response to notifications from the BESS management system, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure; 4. Emergency procedures in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire; 5. Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required; 6. Procedures for handling BESS equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged BESS equipment from the facility; 7. Other procedures as determined necessary by the Local Government to provide for the safety of occupants, neighboring properties, and emergency responders; and 8. Training for local first responders on the contents of the plan, and protocols and schedules for conducting drills of the above procedures

4. Additional Standards that Apply Only to Small Ground-Mounted Solar Facilities

Small Ground-Mounted Solar Facilities Only	
Topic	**Proposed Standard**
Glare	Solar Facilities shall minimize glare onto any abutting or nearby properties. Designs may include, but not be limited to, deliberate placement and arrangement on the site, anti-reflective materials, solar glare modeling, and screening.
Setbacks	Minimum setbacks shall be as follows, unless the Local Government can demonstrate a larger setback is required to protect the public health, safety, or environment: 1. Front yard: The front yard depth shall be at least 20 feet; provided, however, that where the lot is within or abutting a Residential district, the front yard shall not be less than 50 feet; 2. Side yard. The side yard depth shall be at least 20 feet; provided, however, that where the lot is within or abutting a Residential district, the side yard shall not be less than 50 feet; and 3. Rear yard. The rear yard depth shall be at least 25 feet; provided, however, that where the lot is within or abutting a Residential district, the rear yard shall not be less than 50 feet. Local governments that adopt DOER's Small Clean Energy Siting and Permitting Model Bylaw may establish different setbacks in accordance with the provisions of the model bylaw.

5. Additional Standards that Apply Only to Small Clean Energy Wind Generation Facilities

Small Clean Energy Wind Generation Facilities Only	
Topic	**Proposed Standard**
SF6 Alternatives	The Applicant shall investigate alternatives to using SF6 at the facility, and, whenever possible and cost-justified, employ such alternatives. Further, the Applicant shall inform the Local Government when viable alternatives are identified.
Changes in SF6 in Project Equipment	The Applicant shall promptly inform the Local Government if it adds SF6 to any equipment or replaces any equipment due to SF6 loss for the lifetime of the Project.
SF6 Compliance Filing	The Applicant shall provide an annual compliance filing to the Local Government confirming that the Project's SF6 leakage rate has met and continues to meet the leakage rate anticipated in the Decision.

6. Additional Standards that Apply Only to Land-Based Small Clean Energy Wind Generation Facilities

Land-Based Small Clean Energy Wind Generation Facilities Only	
Topic	**Proposed Standard**
Flicker	Wind Generation Facilities shall be sited in a manner that minimizes shadowing or flicker impacts.
Siting	Wind Facilities shall not be sited within: o a distance equal to one and one-half (1.5) times the maximum tip height (MTH) of the wind turbine from buildings, critical infrastructure — including Critical Electric Infrastructure and above-ground natural gas distribution infrastructure — or private or public ways that are not part of the wind energy facility; o a distance equal to three (3.0) times the maximum tip height (MTH) of the turbine from the nearest existing residential or commercial structure; or o (c) a distance equal to one and one-half (1.5) times the maximum tip height (MTH) of the turbine from the nearest property line, and private or public way.

7. Additional Standards that Apply to Offshore Small Clean Energy Wind Generation Facilities or Other Offshore SCEIFs

SCEIF – Offshore Wind Transmission or Other Offshore SCEIFs	
Topic	**Proposed Standard**
Ocean Management Plan	Under 301 CMR 28.00, pursuant to M.G.L. c. 21A §4C and M.G.L. c. 132A, §§ 12A through 16F (Massachusetts Oceans Sanctuary Act), SCEIFs in the Ocean Management Planning Area are subject to siting and performance standards, associated with mapped resources and uses that direct development away from areas with important and high value resources and water-dependent uses.
Ocean Sanctuaries Act	Small Clean Energy Wind Generation Facilities or Other Offshore SCEIFs shall comply with 301 CMR 27.00, pursuant to M.G.L. c. 132A, §§ 12A through 16K and § 18 (the Massachusetts Ocean Sanctuaries Act).
Protected Species (Marine)	Pursuant to 322 CMR 12.00 and 321 CMR 10.00, SCEIFs shall consult with the Department of Fish and Game to avoid, minimize, and mitigate the risk of interaction between vessel activity, fisheries, and North Atlantic right whales and other listed species.
Underwater Archaeological Resources	Small Clean Energy Wind Generation Facilities or Other Offshore SCEIFs that has located a shipwreck or other underwater archaeological resource within inland or coastal waters of the Commonwealth or the lands beneath such waters shall secure a permit from the Board of Underwater Archaeological Resources prior to conducting any activities that may disturb the site or resource. Compliance with the laws and regulations of the Board does not

SCEIF – Offshore Wind Transmission or Other Offshore SCEIFs	
Topic	**Proposed Standard**
	relieve any permit holder of the obligations imposed by other local, state and federal agencies.

8. Additional Standards that Apply Only to Anaerobic Digestion Facilities

SCEIF – Anaerobic Digestion Facilities	
Topic	**Proposed Standard**
Anaerobic Digesters (Free Standing)	SCEIFs shall comply with the requirements for siting, construction, operation, closure and post-closure as applicable to facilities managing solid waste or conducting an activity on a permitted solid waste facility, pursuant to 310 CMR 16.00 and 310 CMR 19.00.
Anaerobic Digesters at Wastewater Treatment Facilities	SCEIFs shall comply with all applicable requirements of M.G.L. c. 21, §§ 26 through 53, 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.