



FACT SHEET


Permit Information for Solar Projects *An Environmental Permitting Factsheet*



This Factsheet provides information on the types of permits that may be required by the Connecticut Department of Energy & Environmental Protection (DEEP) and the timing and sequencing of those permits to developers who are proposing to install solar energy generating facilities. Pre-application permit assistance is available to applicants who would like to meet with permit program staff to discuss their project. To request a pre-application meeting, please complete the [Pre-Application Questionnaire](#) and submit it to DEEP.OPPD@ct.gov.

This permitting factsheet should be used in conjunction with the DEEP Bureau of Energy and Technology Policy's [Integrated Resource Plan](#) Renewable Siting Recommendations, as site selection can often greatly impact the level of investment in design and construction that will be needed to protect natural and drinking water resources and state or federally-listed species. Additionally, DEEP's [STEPS for Solar Development](#) is an on-going process for engaging stakeholders in the procurement, siting, and permitting of solar energy generating systems in Connecticut, and the STEPS webpage contains guidance on siting best practices for solar in various land use scenarios.

- I. **Natural Diversity Data Base (NDDB)** – At the outset of planning for a solar energy generating facility, it is necessary to determine if there are known occurrences of any state or federally-listed species within the impact area of the project site ([Section 26-306 of the Regulations of Connecticut State Agencies](#)). DEEP recommends conducting an initial site evaluation to assess the potential to support state-listed species. Developers will then need to [review NDDB Maps](#) to determine if their project is in an area with documented state-listed species. If in a documented area, consultation with DEEP's NDDB staff will be required to agree upon impact-avoidance and protection measures through the [NDDB Request for Review process](#). Requests for NDDB Review can be submitted through [DEEP's ezFile Portal](#). Protection measures will be included in a determination letter from DEEP; this letter must be included with filings for other state permit applications or general permit registrations. Please note, it typically takes NDDB staff about 10 weeks to review and issue NDDB letters; however, if further survey work during a specific time of year is needed, the process can take longer.




II. Forestry – The solar energy generating facility should not be located in a core forest. Core forest is defined in [Connecticut General Statutes section 16a-3k](#). DEEP strongly recommends using the [Forestland Habitat Impact Map](#) as a screening tool to determine if your project is proposed to be located in a core forest area. For projects located within this Forestland Habitat Map, a 300-foot wetland buffer to protect core forest connectivity and function is typically preferred. If the project is greater than two megawatts and impacts core forest, a letter from the [DEEP Bureau of Natural Resources](#) indicating that the project will not have a material impact upon core forests will be necessary if the project is to be submitted to the Connecticut Siting Council as a Petition for a Declaratory Ruling rather than as an application for a Certificate of Environmental Compatibility and Public Need.

III. Wetlands – Most commonly, regulation of impacts to inland wetlands and watercourses from energy generating facilities exceeding one megawatt in capacity falls under the jurisdiction of the Connecticut Siting Council. Regulation of water discharges to wetlands and watercourses (and other waters of the state), including stormwater, falls under the jurisdiction of DEEP (see IV, below). For projects of less than one megawatt capacity, inland wetlands and watercourse regulatory jurisdiction, as well as the location and design of the project, fall under municipal review. Although local requirements vary between municipalities, typically an upland review area of 100-feet in width around any identified wetland or watercourse will fall under the review of the local wetland commission.

If construction of a solar facility results in a direct discharge to wetlands that meet the definition of waters of the United States, a permit from the U.S. Army Corps of Engineers (USACE) is required. Coverage may be provided by the [USACE Section 404 General Permit](#), or an Individual USACE permit may be required, depending on the disturbance. Additionally, such activities require a [Section 401 Water Quality Certification \(WQC\) from DEEP](#).

The typical processing time for the USACE permit approval is about 6 months, and the typical processing time for DEEP's 401 WQC is about 6 months to one year, depending on the complexity of the project site. More information about wetland permitting can be found at <https://www.epa.gov/cwa-404> and <https://portal.ct.gov/DEEP/Water/Wetlands/Connecticut-Wetlands>.

IV. Stormwater - If the construction of a solar energy generating facility involves disturbing an area greater than one acre, the disturbance must comply with the terms and conditions of the DEEP [General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities](#) (Construction Stormwater General Permit). Projects between one and five acres can comply with the Construction Stormwater General Permit by adhering to local land use requirements for erosion and sedimentation control; the [Connecticut Guidelines for Soil Erosion and Sediment Control](#), as amended; and the [Stormwater Quality Manual](#). Assuming there are applicable local requirements for project approval, no registration with DEEP is required.




Eligible construction projects involving five or more acres of land disturbance and any project requiring Connecticut Siting Council approval must register for coverage under DEEP's Construction Stormwater General Permit. The typical processing time for the Construction Stormwater General Permit registration is about 90 days, depending on the size of the project and whether the project is locally approvable or if it is locally exempt because it falls within the jurisdiction of the Connecticut Siting Council, and will include a 30-day public notice period.

The "General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities" and related information can be found at <https://portal.ct.gov/DEEP/Water-Regulating-and-Discharges/Stormwater/Construction-Stormwater-GP>. Determinations regarding natural resources and other permit requirements (NDDDB, forestry, wetlands, dam safety, flood management, brownfield remediation, landfills, etc.), are typically required and inform the requirements for filing for a stormwater permit registration, and development of the requisite Stormwater Pollution Control Plan.


At any time, the Commissioner can determine that a discharge requires an individual permit under the National Pollutant Discharge Elimination System (NPDES) program and Connecticut's Water Pollution Control Act, typically for very large or more complex project sites with significant receptors adjacent to the site or nearby. Likewise, an applicant can elect to apply for an individual permit rather than seek coverage under the General Permit. Individual permit processing time can be longer, due to the individualized determinations that must be made as part of an individual permit application technical review.

Information on these water permits can be found at: <https://portal.ct.gov/DEEP/Permits-and-Licenses/Water-Discharge-Permits-and-General-Permits>.

- V. Dam Safety** - Prior to initiating the construction of any engineered stormwater control structures, the structures must be evaluated to determine if they will require a Dam Safety Permit. A permit is required if measurable damage from the dam's failure could be caused downstream. A Dam Safety permit need determination would consider the presence of downstream buildings and infrastructure (e.g., roads, bridges, agricultural fields); and the depth, volume, and flowrate of water that would be released downstream to these buildings and infrastructure if a dam were to fail. If a proposed dam would not cause measurable damage, a Dam Safety Permit may not be required. In most cases, any dam which impounds less than three acre-feet of water (when assuming the water level at the crest of the dam) will not require a Dam Safety Permit. The [DEEP Dam Safety Regulatory Program](#) may be contacted at DEEP.DamSafety@ct.gov. The typical processing time for this type of permit is about 6 months and will include a 30-day public comment period on any tentative determination to issue a permit. A Dam Safety Permit need determination for a specific retention basin configuration is necessary prior to applying for a stormwater permit.

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- VI. Flood Management** – In the unlikely event that the proposed solar facility is located in a flood zone area, which is not recommended, the permits described in this paragraph may apply. Solar projects on state property or that receive state funding, including grants or loans, that are located in a floodplain will require a Flood Management Certification from DEEP or an exemption from such certification requirements. Information on Flood Management Certificates and exemptions can be found at <https://portal.ct.gov/DEEP/Permits-and-Licenses/Factsheets-Inland-Water/Flood-Management-Certification-Fact-Sheet>. If the project site is located within the 100-year coastal flood zone, [Public Act 18-82](#), An Act Concerning Climate Change and Resiliency, requires that residential and community structures in areas subject to coastal flooding be elevated two feet above the base flood elevation to account for projected sea level rise. Additionally, FEMA flood zone maps should be consulted to avoid construction in the 100-year flood zone and can be found at <https://msc.fema.gov/portal/home>.
- VII. Brownfields** – Planning for constructing a solar facility on brownfields can be done concurrently with the remediation, or clean up, of a contaminated site. Compliance with the [Remediation Standard Regulations, Section 22a-133k-1 through -3 of the Regulations of Connecticut State Agencies](#), is required and the land records should be consulted to determine whether any type of land use restriction exists as part of the site's remedial outcome. There are various liability relief programs for municipalities and individuals seeking to remediate a brownfield site. More information about DEEP's Brownfield Program can be found at <https://portal.ct.gov/DEEP/Remediation--Site-Clean-Up/Brownfields/Brownfields-in-Connecticut>. Specific information about locating solar facilities on brownfields can be found at <https://portal.ct.gov/DEEP/Remediation--Site-Clean-Up/Clean-Energy-on-Brownfields/Siting-Clean-Energy-on-Brownfields>.
- VIII. Solid and Hazardous Waste Landfills** – For constructing a solar energy generation facility on a closed landfill, an Authorization Application for Disruption of a Solid Waste Disposal Area and a written request to change a landfill's post-closure use is required ([Regulations of Connecticut State Agencies Section 22a-209-13\(d\)](#)). The disruption of the landfill for post-closure development requires the Commissioner's approval prior to any disruption at an active, inactive, or closed solid waste disposal area ([Regulations of Connecticut State Agencies Section 22a-209-7\(u\)](#)).

For certain hazardous waste landfills, it is also necessary to request a change in the Post-Closure Plan and ask the landfill permittee, operator, and owner to request a modification of the landfill's Post-Closure Permit ("Stewardship Permit"). The permittee must notify the Commissioner of the change in the Post-Closure Plan to determine the type of permit modification to be processed. Public notice of the modification to certain local and state government representatives and to people on the facility mailing list is required within 90 days of the change in the Post-Closure Plan. A public comment period and public meeting may be required.



The Disruption Authorization and Post-Closure Use Guidance Document can be found at https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Waste_Permits/disruptguidpdf.pdf. The Disruption Authorization application form can be found at https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Waste_Permits/disruptapppdf.pdf.

Additional requirements, including indemnification agreements and financial assurance in favor of the Commissioner, may apply to landfills at which DEEP is responsible for post-closure care (former CRRM/MIRA facilities).

- IX. Other Considerations** – Applications for locating solar facilities on certain classes of agricultural soils is reviewed by the [Connecticut Department of Agriculture](#), whose [written finding of no material impact](#) upon prime farmland soils or farmland soils of statewide significance is required for solar facilities that exceed two megawatts, if the project is to be submitted to the Connecticut Siting Council as a Petition for Declaratory Ruling rather than as an application for a Certificate of Environmental Compatibility and Public Need, per Public Act 17-218. There are specific considerations made by the Department of Agriculture when locating solar facilities on certain agricultural land in accordance with [PA 17-218](#).
- X. Siting Council** - The Connecticut Siting Council has jurisdiction over solar facilities greater than one megawatt. If the facility is less than one megawatt, local/municipal review is required. Information about the Connecticut Siting Council can be found at <https://portal.ct.gov/CSC> . A project may go to the Siting Council at any time during the permit process. Occasionally, comments from the Siting Council will necessitate changes in project design, and, therefore, permitting. Permit applications may be modified in process.

Additional links to DEEP’s permit programs can be found at <https://portal.ct.gov/DEEP/Permits-and-Licenses/Permits-and-Licenses>.

This fact sheet is intended for informational purposes only based on the information available as of the date of its publication and does not represent a formal jurisdictional determination by which DEEP or any other permitting authority referenced will be bound. Information contained in this fact sheet does not represent a comprehensive list of all permit requirements potentially applicable, which in most cases can only be determined on a site-specific basis. It is intended only to provide information on permits that may be required. Refer to the most current statutes, regulations, and public acts for specific language pertaining to each permit. It is your responsibility to comply with all applicable laws. Contact DEEP (DEEP.CONCIERGE@ct.gov) with questions regarding a specific site or project.

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