

HORIZON SOLAR

ENVIRONMENTAL REQUIREMENTS

Horizon Solar is a 160-megawatt (MW) utility-scale solar photovoltaic (PV) project proposed in Warren County, North Carolina. The Project is being developed by TED Renewables, a Kansas-based renewable energy developer committed to developing clean, renewable energy projects that prioritize human and environmental health through our design standards. TED Renewables is dedicated to developing a project that serves the needs of the community (i.e. economic development, stakeholder engagement, grid stability, etc.) and the environment through protecting the state's natural resources. The following information highlights the requirements Horizon Solar will need to follow to ensure impact on local waterways, neighboring properties, and the overall environment are properly mitigated.

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ)¹

The North Carolina Department of Environmental Quality's (DEQ) mission is to "[provide] science-based environmental stewardship for the health and prosperity of ALL North Carolinians".² Through DEQ's ten separate divisions, which oversee energy, air, land, and water, they help provide stewardship programs to ensure the longevity of North Carolina's natural resources. The division of Energy, Mineral, and Land Resources regulates sediment and erosion control by enforcing the Sedimentation Pollution Control Act of 1973³, which was designed for the purpose of keeping sediment from entering local waterways and adjacent properties.⁴ DEQ will implement the erosion and sediment program under the direction of the Sedimentation Control Commission (SCC); Horizon Solar will fall under the jurisdiction of NCDEQ's Raleigh Regional office.

WHAT IS THE IMPORTANCE OF AN EROSION AND SEDIMENTATION CONTROL PLAN?

Let's start with a couple of definitions. According to DEQ, "Erosion is the detachment and movement of soil particles by water, wind, and ice. Sedimentation is the process by which eroded soil is deposited into water bodies or onto land surfaces."⁵ Human activity that changes the landscape, such as housing & commercial developments, grading, utility-scale solar developments or any other types of development, may change the structure of the soil.

To minimize erosion and sedimentation from development, the Sedimentation Control Law requires developers, like TED Renewables, to submit an erosion and sedimentation control plan for any land disturbance greater than 1 acre.⁶ The plan must be submitted at least 30 days prior to any construction activities and may be approved, approved with modifications, or disapproved with comments by NCDEQ.⁷ Prior to approving a plan, the site and the proposed land disturbing activities will be thoroughly evaluated by DEQ.

The purpose of an erosion and sedimentation control plan is to protect adjacent properties and local waterways from the potential of sediment eroding from the site. Horizon Solar will be fully responsible for submitting the plans, meeting the requirements of NCDEQ's Erosion and Sediment Control Planning and Design Manual, abiding by any modifications requested by DEQ after thorough review, and providing full payment for the required application fees. Throughout the estimated 35 years of commercial operation of the site, Horizon Solar will be responsible for maintaining the site and ensuring the site is properly mitigating any impact to adjacent properties and local waterways.

WHAT IS REQUIRED FOR A PERMIT APPLICATION FOR EROSION AND SEDIMENTATION CONTROL?⁸

- **1.** Horizon Solar must provide a completed, notarized, and signed agreement between the Project and the participating landowners, signifying that Horizon Solar will be financially responsible for this plan.
 - **a.** The landowner must also agree to release pertinent deed and easement information for the purpose of this plan.
- **2.** Application fee to be submitted to NCDEQ. The fee is \$120.00/disturbed acre.
- 3. Completed application.
- 4. Copy of the proposed construction drawings and erosion & sediment control plan to regional offices.
- 5. Narrative, calculations, constructions details and schedule overviewing the project plans.

Plans must be submitted at least 30 days prior to any land disturbing activities taking place. The plan must be approved by the regulatory agency prior to construction commencing. Horizon Solar anticipates beginning construction in 2027.

HOW DOES HORIZON SOLAR GO ABOVE AND BEYOND TO PROTECT NATURAL RESOURCES?

TED Renewables and Horizon Solar understand that protecting our local waterways is paramount. North Carolina's Erosion and Sediment Control Planning & Design Manual provides a strong foundation for responsible construction. These requirements outline crucial measures to effectively prevent sediment transport during construction activities including silt fencing, sediment basins, establishment of vegetation, and stream buffer zones. A buffer zone is a natural area of vegetation adjacent to a stream, lake, wetland, marsh, or any other type of watercourse designed to trap any potential sediment runoff before it can reach the water. The manual notes, "A sufficient buffer zone must be retained or established along any watercourse or lake to contain all visible sediment to the first 25% of the buffer strip nearest the disturbed area." Zones of undisturbed vegetation are to be used in conjunction with, not in place of, other measures outside of buffer zones. While DEQ guidance recommends a minimum width of 15 ft for buffer zones adjacent to watercourses, Horizon Solar is committing to a 50 ft buffer zone from any watercourse to ensure natural resources are effectively protected.

Citations

- 1 https://www.deq.nc.gov/
- 2 https://www.deq.nc.gov/about/history-of-deq
- 3 https://www.ncleg.gov/enactedlegislation/statutes/html/byarticle/chapter_113a/article_4.html
- 4 https://www.deq.nc.gov/energy-mineral-and-land-resources/simplified-overview-sedimentation-pollution-control-act-1973/open
- 5 https://www.deq.nc.gov/about/divisions/energy-mineral-and-land-resources/erosion-and-sediment-control/erosion-and-sediment-education
- 6 https://www.deq.nc.gov/energy-mineral-and-land-resources/land-quality/erosion-and-sediment-control-planning-and-design-manual/erosion-design-manual-rev-may-2013-compressed/download 7 https://www.ncleg.gov/enactedlegislation/statutes/html/byarticle/chapter_113a/article_4.html
- 8 https://www.deq.nc.gov/energy-mineral-and-land-resources/erosion-and-sediment-control/esc-application-guidance-document-1-18-22/open

For The Latest Information On Horizon Solar:

EMAIL: info@horizonsolarproject.com PHONE: 252-313-9023 WEB: horizonsolarproject.com

HorizonSolarProject

