

**AGRICULTURE**

**STATE AGRICULTURE DEVELOPMENT COMMITTEE**

**State Agriculture Development Committee Rules**

**Soil Disturbance on Preserved Farmland and Supplemental Soil Disturbance Standards**

**Proposed New Rules: N.J.A.C. 2:76-25 and 25A**

Authorized By: State Agriculture Development Committee, Susan E. Payne, Executive Director.

Authority: N.J.S.A. 4:1C-31.2.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

Proposal Number: PRN 2023-079.

Submit written comments by October 6, 2023, to:

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The agency proposal follows:

**Summary**

**Introduction**

*In State of New Jersey, State Agriculture Development Committee vs. Quaker Valley Farms, LLC,*

235 *N.J.* 37 (2018), the New Jersey Supreme Court, in a 7-0 ruling, determined that the widespread destruction of productive soil on farm property violated the farmland preservation deed of easement recorded against the property in accordance with the Agriculture Retention and Development Act, N.J.S.A. 4:1C-11 et seq. (ARDA). The court also recognized that the deed of easement contains the dual goals of protecting soil resources and allowing for needed agricultural development, and cautioned the State Agricultural Development Committee (“Committee” or “SADC”) to adopt regulatory standards balancing the nature and extent of soil disturbance with permissible agricultural development on preserved farms.

This rulemaking addresses the Supreme Court’s concerns by clarifying relevant provisions of the farmland preservation deed of easement that have existed, and that have applied to the approximately 2,800 farms preserved pursuant to ARDA, since the State farmland preservation program began in 1983. The proposed rules properly balance the dual goals expressed in ARDA and in the deed of easement of permanently protecting the productive agricultural resources of this State, preserved by the expenditure of over \$1.8 billion in public funds, and of supporting the economic viability of preserved farms. This rulemaking supports and enhances the State’s business climate by providing predictability to preserved farm landowners so that they can adequately prepare and properly effectuate their agricultural business plans.

The proposed rules at Subchapters 25 and 25A are based on a number of research methods and sources.

The SADC, relying on aerial photos and computerized mapping conducted by Rowan University, analyzed and categorized soil disturbances on all preserved farms, and a large sample of unpreserved farms, in New Jersey. In 2013, the SADC reviewed the airphoto imagery of 2,198 preserved farms totaling approximately 205,000 acres; in August 2014, it analyzed almost 600 randomly selected

unpreserved farms with a higher than median value of improvements according to New Jersey farmland assessment data totaling about 18,000 acres in order to ensure that the analysis ultimately captured the extent of agricultural development existing on farms Statewide, whether or not they were preserved; in 2020-21 the SADC analyzed 2,676 preserved farms totaling almost 235,000 acres and soil disturbances were categorized based on 2015 airphotos; and in 2022, 2,913 preserved farms and 245,275 acres were reviewed based on 2020 air imagery.

The proposed rules at Subchapters 25 and 25A are the product of research from other written authorities. The SADC consulted best management practices and standards issued by the United States Department of Agriculture (USDA), Natural Resources Conservation Service, on topsoiling, land grading, earth fill and gravel fill specifications, geotextiles, and land reclamation. The USDA's Web Soil Survey, available at <https://websoilsurvey.nrcs.usda.gov/app/>, provided important information, as well as the "Keys to Soil Taxonomy," <https://www.nrcs.usda.gov/sites/default/files/2022-09/Keys-to-Soil-Taxonomy.pdf>. The SADC researched the soil management and farmland reclamation standards of regulatory agencies in Illinois, Kansas, Kentucky, Minnesota, Missouri, Pennsylvania, and Virginia. Performance standards for soil reconstruction in relation to mining operations on prime farmland were also reviewed in the USDA's "Notice of proposed specifications with request for comments" and "Final notice" in the Federal Register at Volume 63, No. 208 (October 28, 1998) and Volume 64, No. 124 (June 29, 1999), respectively. Other technical resources that informed these regulations are applicable provisions in the New Jersey Soil Erosion and Sediment Control Act standards, N.J.A.C. 2:90; the New Jersey Department of Environmental Protection's New Jersey Stormwater Best Management Practice Manual, available at [dep.nj.gov/stormwater/bmp-manual/](http://dep.nj.gov/stormwater/bmp-manual/); the SADC's agricultural management practices, N.J.A.C. 2:76-2A and 2B; the New Jersey Uniform Construction Code, N.J.A.C. 5:23; and the Step-Point Method of Sampling: A Practical Tool in Range Research, in the *Journal of Range*

*Management*, 10, 208-212, at <https://doi.org/10.2307/3894015>, assisted in the development of the regulation by which vegetative cover is calculated and provided the pictorial representation of the method in the rules. The American Society of Agronomy, Soil Science Society of America, Special Publication Number 45, furnished the important definition of “soil loss tolerance rate,” or “T,” available at: <https://access.onlinelibrary.wiley.com/doi/abs/10.2134/asaspecpub45.c8>. Agency staff also consulted with recognized professionals having expertise in the restoration of disturbed land and soil.

### **Stakeholder Engagement**

The Committee has solicited feedback and heard from a broad range of interested parties leading to this rulemaking. Agency staff undertook a substantial outreach effort that included over two dozen meetings that engaged various stakeholders prior to formulating the proposed rules. SADC staff met with the board of the New Jersey Farm Bureau, county agriculture development boards (CADBs), county boards of agriculture, and environmental conservation organizations. An SADC subcommittee tasked with assisting in the development of the proposed rules met with a subcommittee of the New Jersey State Board of Agriculture for in-depth discussions on June 6, 2022, December 16, 2022, March 15, 2023, and May 17, 2023.

The SADC also solicited and received numerous written comments from preserved farm landowners and from entities, including the New Jersey Farm Bureau, CADBs, Farm Credit East, participating land trusts and nonprofit entities interested in the farmland preservation program, and members of the public.

The Committee has kept the general public and interested parties further apprised of the proposed rules by posting to the agency website staff presentations made at SADC meetings over the past several years at: <https://www.nj.gov/agriculture/sadc/news/populartopics/index.html>.

The SADC received numerous oral comments, and some written comments, from the general

public during its monthly public meetings over an extended period of time. The Committee considered all of the pre-proposal comments in drafting these rules, and many elements of the proposed rules are the product of public input.

### **General Provisions**

This Summary will use “grantor” and “landowner” interchangeably. “Grantor” is defined not only as the landowner who conveyed the development easement, but also that person or entity’s “heirs, executors, administrators, personal or legal representatives, successors, and assigns.” “Grantee” will be used interchangeably with, and also means, the “holder of the development easement,” the recorded document by which farm property, or “premises,” is preserved. The State Agriculture Development Committee will be referred to, where appropriate, as “SADC” or “Committee.”

### **Subchapter 25**

N.J.A.C. 2:76-25.1 states that the soil disturbance rules apply to all farms preserved by a deed of easement recorded pursuant to ARDA and enrolled in New Jersey’s farmland preservation program because the SADC provided a cost share grant to a county or nonprofit organization to acquire the development easement, the SADC acquired the development easement directly, or the SADC accepted a donation of the easement.

N.J.A.C. 2:76-25.2 provides that the purposes of the rules are to define soil disturbance and to establish a soil disturbance limitation on preserved farms. Exceeding the limitation is detrimental to soil conservation, is a violation of the deed of easement, adversely affects agricultural viability by negatively impacting the ability of current and future landowners to devote the preserved premises to a variety of agricultural uses, and is inconsistent with the goals of maintaining and enhancing the agricultural industry in this State as expressed in ARDA and N.J.A.C. 2:76-6.1.

N.J.A.C. 2:76-25.3 is the definition section of the proposed rules. The definitions in this section

are derived from the scholarly work of Rutgers-The State University of New Jersey, the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), and the International Committee on Anthropogenic Soils.

The definitions are to be read in concert with one another and serve as the foundation for the remainder of the rules. Several definitions are included because they are components of other defined terms in order to better inform the regulated community and to assist in the administration of the regulations. For example, both “actively cropped” and “minimum vegetative cover” are defined due to their importance in the term “temporary parking,” which is an agricultural practice exempt from the limitations contained in the proposed rules. All 23 agricultural practices exempt from the soil disturbance limits are defined. Some of the more critical definitions are:

“Soil disturbance” is defined as soil alteration, soil surfacing, or soil compaction.

“Soil alteration” is defined as human-altered and/or human-transported soil including, but not limited to, soil movement, grading, leveling, importation, exportation, cut, and/or fill, but does not include normal tillage and deep tillage.

“Normal tillage,” limited to the depth of the topsoil layer, is a generally accepted agricultural practice for seedbed preparation and cultivation of soil, including moldboard plowing, disking, chisel plowing, hill and furrow plowing, bed shaping, and the use of similar site preparation practices determined by the SADC where the practice does not meet the definition of “human-altered” and “human-transported” soils.

“Deep tillage” is tillage operations below the normal tillage depth in a manner consistent with a farm conservation plan modifying adverse physical or chemical properties of a soil that inhibit plant growth. Examples of such properties are compacted layers formed by field operations, restricted layers, such a cemented hardpans in the root zone, overwash or deposits from wind and water erosion or

flooding, or contaminants in the root zone. Elevation or topography changes are excluded from the definition of “deep tillage.”

A “hoophouse,” also known as a “high tunnel,” “low tunnel,” “temporary greenhouse,” or “polyhouse,” is an individual temporary agricultural structure used exclusively for the production and storage of live plants by protecting them from the elements or to extend the growing season. Examples of hoophouse construction materials are included in the definition. A “tent” is a temporary structure with an impermeable covering to provide shelter, and does not have a permanent foundation, footing, floor, or anchoring system. A tent can be temporary, meaning it is in place on the premises for less than 120 cumulative days in a calendar year, without counting towards the soil disturbance limit.

The definitions include “travel lane,” a generally linear feature on a farm primarily used for the conveyance of vehicles, pedestrians, livestock, and/or equipment, and “unimproved travel lane,” also known as a “farm lane,” which is a travel lane not more than 10 feet wide for one-way traffic or 16 feet wide for two-way traffic, measured from the outside of the tracks, plus two feet on each side for a shoulder, that has not been surfaced and is not constructed closer than 300 feet in parallel to another travel lane or unimproved travel lane.

“Soil disturbance” includes “soil surfacing,” defined as human-made or human-placed covering over the soil through suspended surfaces and ground-level surfaces, unless exempt by the SADC as an agricultural practice.

A “suspended surface” is a surface placed above the soil such as, but not limited to, building roofs, trailers, greenhouses, run-in sheds, pavilions, open-floored arenas, and decks.

A “ground-level surface” is a surface placed in contact with the soil including, but not limited to, flooring, paving, asphalt, asphalt millings, reinforced concrete, porous asphalt, porous concrete, stone, rock, gravel, pavers, bricks, block, rubber, sand, cinders, construction mats, pond liners, and non-topsoil

stockpiles.

“Soil compaction” means any activity other than normal tillage resulting in soil dry bulk density above root limiting levels, or in the consolidation of or a reduction in a soil’s capacity to infiltrate or percolate water. A non-exclusive list of causes of soil compaction is included in the definition.

“Topsoil” is the uppermost layer in a natural or cultivated soil profile where cultivation, root growth, biological activity, and organic matter are concentrated. The definition further explains the composition of topsoil and that the depth of this layer of soil, also known as the “plow layer,” typically varies between six inches and 12 inches.

Other definitions address soil characteristics; the activities and structures on preserved farms associated with soil disturbance; soil protection and rehabilitation; the various agricultural practices that are exempt from soil disturbance limits; and words and phrases that help determine conformance with the rules. The soil disturbance limit established in the regulation applies to the “premises,” that is, the portion of a farm subject to the provisions of the farmland preservation deed of easement and described by metes and bounds in the deed.

Many of the definitions have been taken from previously-adopted rules and standards, such as the “vegetative cover” definition in the SADC’s agricultural management practice (AMP) for equine activities (N.J.A.C. 2:76-2A.10); the definitions related to solar energy in the SADC’s Solar Energy Generation on Preserved Farms, N.J.A.C. 2:76-24; the definitions of “livestock confinement area” and “livestock training area” in the New Jersey Department of Agriculture’s animal waste management rules (N.J.A.C. 2:91); and the definitions of “contiguous premises” in the Department of Environmental Protection’s (DEP) freshwater wetlands protection rules (N.J.A.C. 7:7A); and the definitions of “soil horizon,” “soil profile,” and “Soil Survey Report” in the DEP’s standards for individual subsurface sewage disposal systems (N.J.A.C. 7:9A).



Key definitions have also been incorporated from authoritative agricultural resources, such as the definitions of “agricultural productivity” (NRCS’s National Agricultural Land Evaluation and Site Assessment handbook); “bulk density” (NRCS’s Soil Quality Indicators Fact Sheet); “minimum rooting depth” (NRCS’s Specifications for Prime Farmland); “saturated hydraulic conductivity” (NRCS’s Soil Survey Technical Note 6); and “low-ground pressure equipment” (Penn State Extension Service).

N.J.A.C. 2:76-25.4 contains an itemized list of 23 agricultural practices exempt from the soil disturbance limitation in the subchapter. The exemptions also include, at subsection (b), conservation practices required to address runoff and soil erosion from normal tillage, that meet certain criteria and are designed and installed in accordance with, and that meet or exceed, NRCS standards. A conservation practice may also be considered exempt by the Committee pursuant to subsection (c) if the water and soil erosion measure meets certain criteria at subsection (b) and is caused by factors beyond the landowner’s control, such as natural weather conditions, or drainage coming off the farm as a result of stormwater from adjoining roads and/or adjacent properties.

Conservation practices, including stormwater management facilities, are not considered exempt from the soil disturbance limitation when, as set forth at subsection (d), they are necessitated by soil disturbance activities or from exempt agricultural practices at N.J.A.C. 2:76-25.4, except for normal tillage.

N.J.A.C. 2:76-25.4(e) provides that the Committee, on its own or upon the request of a grantor or grantee, can designate additional exempt activities by amending subsection (a) upon a finding that the activity meets various criteria. The designation of additional exempt activities must be undertaken through rulemaking. The proposed regulation provides that various government and non-government entities with agricultural expertise can be consulted when the SADC considers the adoption of additional

exempt agricultural practices.

N.J.A.C. 2:76-25.5 establishes a soil disturbance limit of 12 percent or four acres (12%/4 ac.), whichever is greater, on the preserved premises, which is the portion of the farm subject to the terms and conditions of the recorded deed of easement and described by metes and bounds in the deed. Areas of the preserved premises, once disturbed, shall continue to be deemed areas of soil disturbance until such time as the SADC determines they have been rehabilitated pursuant to N.J.A.C. 2:76-25.9 and 25A.9.

Severable and non-severable exception areas, which were also called “exclusion areas” in older farmland preservation deeds of easement, are portions of the farm property not subject to the deed and, therefore, soil disturbance within those areas does not count towards the 12%/4 ac. limitation. In addition, activities within the footprint of already-disturbed areas will not count as additional disturbance subject to the soil disturbance limit.

As an alternative to the 12%/4 ac. limitation, N.J.A.C. 2:76-25.5(b) allows grantors to apply to the Committee for additional soil disturbance over and above that existing on the premises as of July 1, 2023, in an amount equal to two percent of the premises or one acre (2%/1 ac.), whichever is greater. Soil disturbance existing on the premises as of July 1, 2023 will be determined by a property base map or amended base map, the Committee will prepare and distribute to landowners pursuant to N.J.A.C. 2:76-25.10. To be eligible for the additional 2% or 1 acre of soil disturbance, whichever is greater, the premises must be in compliance with the deed of easement and the proposed disturbance will result in total soil disturbance exceeding the 12%/4 ac. limitation. This alternate option, subject to approval in a decision by the Committee, benefits landowners whose premises are approaching, or are already over, the limit set forth at N.J.A.C. 2:76-25.5(a). Proposed N.J.A.C. 2:76-25.5(g) provides that removal of topsoil from the premises is expressly prohibited, except if directly related, and incidental to, the

harvesting of agricultural or horticultural products, such as soil attached to harvested potatoes.

N.J.A.C. 2:76-25.6 provides for two types of waivers from the limitation at N.J.A.C. 2:76-25.5. A landowner can apply to the Committee and grantee for either or both of the waivers: a production waiver, allowing additional soil disturbance to a maximum limit of 15 percent of the premises or six acres, whichever is greater (paragraph (a)1); or an innovation waiver, allowing additional soil disturbance beyond the limits established at N.J.A.C. 2:76-25.5 and N.J.A.C. 2:76-25.6(a)1. Eligibility and criteria for the waivers are set forth at paragraph (a)1 and subsections (b), (c), (d), and (e) depending on which waiver(s) is, or are, sought. No waiver can be granted, unless the Committee and grantee determine that the premises is in compliance with the deed of easement and, for the production waiver, the proposed disturbance exceeds the limitation set forth at N.J.A.C. 2:76-25.5.

Subsections (f), (g), (h), and (i) provide details as to the filing of the application and its contents; timeframes for completing the application; notice to relevant parties, and contents of the notice. N.J.A.C. 2:76-25.6(j) sets forth criteria for considering whether to grant a waiver and provides that if the grantee is a county or a nonprofit organization, the decision must be made jointly by the Committee and that entity. Subsection (j) further states that the decision to approve, approve with conditions, or deny the waiver request must be in the form of a resolution by the grantee and Committee, and describes the contents of the resolution. The Committee's resolution will be recorded by the Committee with the clerk of the county in which the premises is located, and a copy of the recorded document is to be provided to the grantee, if appropriate.

N.J.A.C. 2:76-25.6(k) precludes the initiation of soil disturbance activities authorized by a waiver until the grantor: has implemented all required engineering practices, as defined in the field office technical guide that are planned for year one of the stewardship conservation plan; is on, or ahead of,

schedule with implementation of all other practices prescribed in the stewardship conservation plan; a forest stewardship plan, if applicable, has been approved by the New Jersey Forest Service and the grantor is on schedule with all prescribed management activities; and obtains and complies with all required permits and approvals. Waiver(s) granted pursuant to N.J.A.C. 2:76-25.6 may be revoked at any time by the Committee if the grantor fails to maintain compliance with all conditions of waiver approval, the deed of easement, or this subchapter. If a waiver is revoked, the limit of the disturbance area is to be rehabilitated in accordance with N.J.A.C. 2:76-25.9 and 25A.9.

N.J.A.C. 2:76-25.7 allows the same landowner owning contiguous premises to aggregate, on one of the premises, the soil disturbance limit set forth at N.J.A.C. 2:76-25.5 that would be attributable to each of the premises. This allowance is designed to address existing and prospective agricultural operations that concentrate, or plan on concentrating, their business infrastructure at one location. The aggregated soil disturbance acreage cannot exceed the combined individual allocations for each of the contiguous premises. For example, the same landowner owning two contiguous parcels each of which are 50-acres would be eligible for a maximum soil disturbance limit of 12 percent, or six-acres, on each parcel, or a total of 12-acres. Pursuant to N.J.A.C. 2:76-25.7, the landowner would be eligible to aggregate that 12-acres of disturbance on one of the 50-acre parcels.

N.J.A.C. 2:76-25.7(a) sets forth the procedures by which aggregation can be approved by the Committee and grantee, if applicable, including the need for a resolution, adopted at a public meeting, that contains detailed findings of fact and conclusions of law; timeframes for issuing a decision; notice of the decision to the grantor; and the right to appeal the Committee's decision to the Appellate Division of the Superior Court. N.J.A.C. 2:76-25.7(b) and (c) provides that a resolution approving aggregation of soil disturbance on contiguous premises shall contain a provision that, unless as set forth at subsection (d), each premises is permanently associated with, and shall not be conveyed separate and apart from,

each other; the Committee is tasked with preparing and recording an appropriate document memorializing the reallocation of the soil disturbance limit to one premises and the prohibition on further division of the contiguous premises. Subsection (d) recognizes that a landowner may reconsider exercising an approved aggregation; upon a showing by the landowner of reasonable cause, the Committee may, upon reasonable terms and conditions, approve a disaggregation of the parcels, in which case each of the contiguous parcels is subject to the soil disturbance limit set forth at N.J.A.C. 2:76-25.5.

N.J.A.C. 2:76-25.8 addresses the soil disturbance limit and production waiver eligibility in the context of a division of the preserved premises, which is conditionally permitted in the deed of easement. Subsection (a) requires each parcel resulting from a division to comply with the soil disturbance limitation at N.J.A.C. 2:76-25.5 at the time of division. Subsection (b) requires that the soil disturbance limitation at N.J.A.C. 2:76-25.5 and disturbance associated with production waiver eligibility prescribed at N.J.A.C. 2:76-25.6(a)1 is to be allocated proportionally to each divided parcel, unless the limit is aggregated as set forth at N.J.A.C. 2:76-25.7. For example, if a 100-acre parcel, which has a maximum soil disturbance limit of 12 acres in accordance with N.J.A.C. 2:76-25.5(a), is divided into two, 50-acre parcels, each of those parcels will have a maximum allowable soil disturbance limit of six acres. The Committee will prepare and record a document memorializing an approved division and reallocation of the soil disturbance limit on the resultant divided parcels, and a copy of the recorded document will be provided to the landowner and, if applicable, to the grantee, pursuant to N.J.A.C. 2:76-25.8(c). Subsection (d) further provides that there can be no increase in the soil disturbance limitation set forth at N.J.A.C. 2:76-25.5 as a result of a division of premises.

The rules allow a landowner to rehabilitate disturbed soils, so that they no longer count towards the disturbance limit established at N.J.A.C. 2:76-25.5. N.J.A.C. 2:76-25.9 describes the procedures by

which a landowner can apply to the Committee for approval of a rehabilitation plan, the components of which are detailed at N.J.A.C. 2:76-25A.9, and the timeframes within which a complete rehabilitation plan and application must be submitted by the landowner, reviewed by the Committee, and a decision by the Committee is to be issued. The Committee has the discretion to reduce, and/or determine the nonapplicability of, rehabilitation plan components in accordance with N.J.A.C. 2:76-25.9(b). N.J.A.C. 2:76-25.9(c) requires that the landowner file an application and rehabilitation plan with the Committee; subsection (d) provides that the Committee has 60 days from receipt of the application to make a completeness determination and notify the landowner; and subsection (e) provides that the Committee's technical review of the rehabilitation plan shall occur within 90 days, during which time the Committee can notify the landowner of any deficiencies in the plan. Notification must be in writing, and the landowner has 30 days to cure any deficiencies, as set forth in subparagraph (e)1iii; the review period is paused pending submission of any requested information, submittal of the requested information restarts the application review period, and the failure of the landowner to cure any deficiencies is considered a withdrawal of the application, as set forth at subparagraphs (e)1ii, iv and v. N.J.A.C. 2:76-25.9(e)2 and 3 require that notice of a denial, containing the reasons for the decision, or of an approval and authorization to commence the rehabilitation plan, shall be provided by the Committee to the landowner by certified mail, return receipt requested, who has the right to appeal a denial in accordance with N.J.A.C. 2:76-25.12, and the landowner is required to start the rehabilitation project within 12 months of the notice to commence. The Committee has the right to extend its review period provided there is appropriate justification, with notice of the extension being provided to the grantor, as set forth at subsection (f), which also provides for an automatic approval of the rehabilitation plan if the Committee fails to act within the review period(s).

Subsection (g) describes how a project is to be implemented, in sequence, by the landowner in accordance with an approved rehabilitation plan and how the project will be monitored by the Committee, including a notice of commencement (paragraph (g)1); a rehabilitation work sequence that can only proceed upon advance notice to, and inspection and approval of each step by, the Committee before the landowner can proceed with each step (paragraph (g)2); a one-year period to complete a step if interim approval was not obtained from the Committee, with the availability of one, one-year extension per step, but no more than two extensions per plan, with the failure of a step to meet rehabilitation standards rendering the plan unsuccessful (sub-subparagraphs (g)2i(1) and (2)); and the requirement that the grantor retain records related to each interim approval in order to proceed with the next step and to obtain final certification of the plan in accordance with N.J.A.C. 2:76-25A.9(d). Committee monitoring includes, as set forth at N.J.A.C. 2:76-25.9(g)3, 4, and 5, respectively, the authority to inspect the premises before, during, or after rehabilitation; the ability to collect soil samples or other relevant site information; and the right to issue a stop work order if a project is being undertaken contrary to the approved rehabilitation plan.

Subsection (g)6 sets forth post-rehabilitation procedures. The grantor is to submit a final certification report in accordance with N.J.A.C. 2:76-25A.9(d), and the Committee is to complete an administrative review of the report within 60 days of receipt, as required pursuant to subparagraph (g)6i. Subparagraphs (g)6ii through 6v provide that the Committee shall schedule a site visit and review materials submitted by the landowner for technical completeness, and if the Committee determines that the rehabilitation project was not completed according to the approved plan, then notification is to be provided to the grantor of the deficiencies, corrective actions, and the time within which the actions must be taken to bring the rehabilitation area into compliance with the rehabilitation standards at N.J.A.C. 2:76-25A.9. If the rehabilitation work is still deficient after the time for corrective action has

expired, then a resolution shall be issued denying certification of the rehabilitation, in which case the land area subject to the deficient rehabilitation work continues to be counted towards the soil disturbance limitation at N.J.A.C. 2:76-25.5. The resolution can be appealed pursuant to N.J.A.C. 2:76-25.12. If the Committee determines that the rehabilitation was completed according to the approved plan, then the Committee issues a final certification, memorialized by resolution, stating that all soil rehabilitation standards at N.J.A.C. 2:76-25A.9 were satisfied, and the rehabilitated area no longer counts towards the soil disturbance limitation at N.J.A.C. 2:76-25.5.

Baseline mapping of soil disturbance on preserved premises, to be performed by the SADC and effective as of July 1, 2023, is set forth at N.J.A.C. 2:76-25.10(a).

N.J.A.C. 2:76-25.10(b) describes how notice of the baseline mapping will be provided to landowners and to the grantees, and the contents of the notice. N.J.A.C. 2:76-25.10(b)1, 2, and 3, respectively, state that notice will be provided by regular mail to the recipient's last known address; that if the mail is returned as unclaimed or undeliverable, the Committee will make a good faith effort to provide notice in another manner; that the notice will contain the baseline map and a link to the Committee's website that connects to an online version of the map showing the extent and classification of soil disturbance features on the premises; and that the notice will include a statement that the grantor and/or grantee can request, in writing, reconsideration of the mapping and, if still dissatisfied, a hearing before the Committee on, the calculated extent or classification of map features.

N.J.A.C. 2:76-25.10(b)4 provides that the baseline mapping notice will also include a statement that grantors seeking to qualify for the additional 2%/1 ac. of soil disturbance as set forth at N.J.A.C. 2:76-25.5(b) and who want to appeal the map shall submit the appeal to the Committee within 60 days of the effective date of the subchapter.



N.J.A.C. 2:76-25.10(c) states that the failure of a landowner who is seeking the 2%/1 ac. allowance to submit a request for Committee reconsideration of the soil disturbance mapping within 60 days of the effective date of the subchapter constitutes the landowner's consent to the baseline soil mapping of the premises. All other landowners can submit a written request to the Committee for reconsideration of the calculated extent or assigned classification of soil disturbance mapping at any time, as set forth at N.J.A.C. 2:76-25.10(d).

N.J.A.C. 2:76-25.10(e) and (e)1, 2, and 3, respectively, describe the procedures if a written request for reconsideration is filed with the Committee, including a site visit by Committee staff; the solicitation of comments from the grantor and Grantee within 60 days of the site visit; the Executive Director's issuance of a final, updated soil disturbance map within 120 days of the reconsideration request; and that if the grantor or grantee disagrees with the revised map issued by the Executive Director, the request for reconsideration will be heard by the Committee, which will make a final decision.

Soil disturbance mapping shall be reviewed regularly as part of the monitoring of each preserved farm required by Committee rules or upon a grantee's request, and a current version of the mapping is available to the grantor and/or grantee at any time upon written request, as set forth at N.J.A.C. 2:76-25.10(f) and (f)1. N.J.A.C. 2:76-25.10(f)2 provides that an actual or potential increase of two or more acres of soil disturbance must be identified in the annual monitoring report the grantee submits to the Committee and, as set forth at N.J.A.C. 2:76-25.10(f)3, for farms within 75 percent of the soil disturbance limit at N.J.A.C. 2:76-25.5, all newly identified actual, or proposed, soil disturbances must be reported by the grantee to the Committee within 60 days of identification.

As required at N.J.A.C. 2:76-25.10(g), the grantee must include in its annual monitoring report to the Committee, for those farms within 50 percent of the soil disturbance limit established at N.J.A.C.

2:76-25.5, a description of newly identified or amended soil disturbances by type, location, and square footage, with N.J.A.C. 2:76-25.10(g)1i through iv setting forth the details of a complete and accurate description. N.J.A.C. 2:76-25.10(g)2 and 3 require the grantee to take photographs of each new disturbance and to provide the photos in digital format to the Committee, and the grantee is to provide any additional information the Committee deems reasonable and necessary, respectively.

N.J.A.C. 2:76-25.10(c) states that the Committee can inspect all farms for ongoing compliance with the Committee's approval of the additional 2%/1 ac. of soil disturbance pursuant to N.J.A.C. 2:76-25.5(b) or approval of a waiver in accordance with N.J.A.C. 2:76-25.6.

N.J.A.C. 2:76-25.11(a) provides that the grantee and/or Committee may pursue remedies available in ARDA and in the deed of easement against a landowner who violates the subchapter.

N.J.A.C. 2:76-25.12(a) provides that any hearing requests to the Committee be in writing and sent to the SADC's mailing address in Trenton. N.J.A.C. 2:76-25.12(b) requires that hearings by the grantee that is a county and Committee at which decisions are made regarding landowner applications or appeals pursuant to this subchapter must be held in accordance with the Senator Byron M. Baer Open Public Meetings Act, N.J.S.A. 10:4-6 et seq. N.J.A.C. 2:76-25.13(a) authorizes the Committee to delegate any action in the subchapter to the Executive Director, when appropriate, except for hearings set forth at N.J.A.C. 2:76-25.13(b); anyone aggrieved by the Executive Director's decision can appeal that decision to the Committee, and the Executive Director can bring any delegated action to the Committee in his or her discretion, pursuant to N.J.A.C. 2:76-25.13(b) and (c), respectively. A final decision by the Committee is deemed final administrative agency action appealable to the Superior Court, Appellate Division in accordance with N.J.A.C. 2:76-25.13(d).

The severability clause at N.J.A.C. 2:76-25.14 states that the provisions at Subchapter 25 remain valid even if another part, or other parts, of the subchapter is, or are, declared illegal or unenforceable,

for any reason, by a court of competent jurisdiction.

### **Subchapter 25A. Supplemental Soil Disturbance Standards**

Many of the definitions at N.J.A.C. 2:76-25A.3 are the same terms at Subchapter 25 and in other relevant SADC rules but reiterated for consistency and ease of reference. Other definitions set forth in more detail below help clarify and administer the technical standards at Subchapter 25A by which soil disturbance waivers and soil rehabilitation at Subchapter 25 are to be evaluated.

An “avoid-control-trap-system” is a means of preventing pollution from sediment, nutrients, bacteria, and pesticides being introduced into the environment, controlling the risks associated with the unavoidable introduction of pollutants, and using best management practices to trap pollutants close to their source. A “vegetated filter strip” reduces excess sediment in surface waters and dissolved contaminants, suspended contaminants, and associated contaminants in runoff by means of a grassed filter area meeting or exceeding the filter strip conservation practice issued by USDA-NRCS.

“Basal cover” is the portion of the soil surface covered by the base of plants, not including the vertical projection of exposed leaf areas or the foliage canopy. “Dense vegetative cover” means 90 percent or more of live vegetative cover, year-round, over a stockpile of topsoil. The “step point method” determines the amount of vegetative cover and is detailed at N.J.A.C. 2:76-25A.6.

“Coarse mulch” is defined as wood chip mulch made up of shredded leaves, bark, and wood particles from one inch to four inches in length and with at least 50 percent of the material having a length of two inches or more.

“Constrained slopes” are slopes equal to or greater than five percent over a minimum run of 10 feet.

“Topsoil,” which is defined at N.J.A.C. 2:76-25.3, can be stockpiled in two ways: “low intensity”

and “moderate intensity,” the methods for which are described at N.J.A.C. 2:76-25A.5.

“Soil loss tolerance rate,” also known as “T,” is the maximum rate of annual soil loss that will permit crop productivity to be sustained economically and indefinitely on a given soil as defined in the USDA-NRCS soil survey manual issued in March 2017, with minor amendments in 2018. “Soil structure” means the arrangement of soil particles into aggregates forming cohesive and distinct structural units. The “soil survey report” is a document from the USDA-NRCS web soil survey that includes maps of particular geographic areas reflecting distribution of soil mapping units, and a narrative description of the uses and properties of the soil series shown on the maps.

N.J.A.C. 2:76-25A.4(a) establishes that soil disturbance activities in connection with on-farm utilities are exempt pursuant to N.J.A.C. 2:76-25.4 when constructed in accordance with applicable criteria at N.J.A.C. 2:76-25A.4(b), (c), and (d). N.J.A.C. 2:76-25A.4(b) sets forth general criteria for protecting soil when utilities are constructed on preserved premises, including when construction activities are to be completed, the use of equipment and ground protection mats, a prohibition on mechanical or structural soil compaction prior to or during installation of the utilities, and on altering the topography. N.J.A.C. 2:76-25A.4(b)2 also provides that gravel construction roads and unprotected construction roads count towards the soil disturbance limit at N.J.A.C. 2:76-25.5 and need to be rehabilitated in accordance with N.J.A.C. 2:76-25.9 and 25A.9. N.J.A.C. 2:76-25A.5(b)5 requires that bare soil be seeded in accordance with “Permanent Vegetative Cover for Soil Stabilization” at N.J.A.C. 2:90-1.3(a)1 in the State’s soil erosion and sediment control standards, or in compliance with a farm conservation plan approved by the local soil conservation district. Soil loss from the utility area is to be maintained at or below “T.”

More particular criteria to protect and rehabilitate soil when utilities are buried underground are established at N.J.A.C. 2:76-25A.4(c). N.J.A.C. 2:76-25A.4(c)1 provides that underground utilities

are to be buried below the minimum rooting depth or at depths required by applicable building codes or other relevant rules. Subparagraph (c)1i states that, to the maximum extent practicable, a trenching machine or horizontal directional drilling is to be employed for burying underground utilities. N.J.A.C. 2:76-25A.4(c)1ii allows for horizontal directional drilling below the minimum rooting depth, but requires that soil disturbance remaining on the surface of the ground as a result of horizontal directional drilling be rehabilitated in accordance with N.J.A.C. 2:76-25.9 and 25A.9. N.J.A.C. 2:76-25A.4(c)iii sets forth alternate excavation methods and the means to protect topsoil and subsoil when a trenching machine or horizontal directional drilling are infeasible.

N.J.A.C. 2:76-25A.4(d) describes soil protection and rehabilitation criteria when a solar energy facility is constructed on preserved farmland. The facility must be approved in accordance with N.J.A.C. 2:76-24 prior to construction (paragraph (d)1) and be designed to minimize the facility-related disturbance area (paragraph (d)2); the land within the solar-related disturbance area may be utilized for producing crops, pasturing, and grazing, or other soil-based agriculture when part of an approved farm conservation plan (paragraph (d)3) and, as set forth at N.J.A.C. 2:76-25A.4(d)4, those portions of the solar-related disturbance area that maintain minimum vegetative cover shall not count toward the soil disturbance limit at N.J.A.C. 2:76-25.5. As stated at N.J.A.C. 2:76-25A.4(d)5, travel lanes used solely to access the solar facility are not considered exempt as an unimproved travel lane listed at N.J.A.C. 2:76-25.4. N.J.A.C. 2:76-25A.4(d)6 requires maintenance of minimum vegetative cover over the entire solar-related disturbance area, that the facility be kept in good working order, and that land underneath non-functioning solar panels does not qualify for an exemption pursuant to N.J.A.C. 2:76-25.4. N.J.A.C. 2:76-25A.4(d)7 includes the criteria for protecting the soil when the solar facilities are removed at the end of their useful life, and the entire solar-related disturbance area is to be rehabilitated pursuant to N.J.A.C. 2:76-25.9 and 25A.9. N.J.A.C. 2:76-25A.4(d)8 states that the criteria at N.J.A.C. 2:76-25A.4(d) are not to

be construed as abrogating, superseding, or replacing other solar energy generation laws and rules applicable to preserved farmland.

Topsoil stockpiling general performance criteria, performance criteria for low and moderate intensity soil stockpiling, and maintenance of soil stockpiles, are described at N.J.A.C. 2:76-25A.5(a), (b), and (c), respectively.

General performance criteria are: stockpiles cannot be located in regulated areas such as wetlands, wetland transition areas, waters of the state, and floodplains (paragraph (a)1); they need to be oriented to allow for drainage around the stockpile, to allow the stockpile to be well drained and aerobic, and to avoid ponding water around the soil (paragraph (a)2); movement of topsoil can only take place when soils on site are significantly below field moisture capacity in order to minimize compaction (paragraph (a)3); topsoil must be removed and placed using low ground pressure equipment, unless work is done from ground protection mats or existing travel lanes (paragraph (a)4); areas stripped of topsoil must have existing vegetation removed by harvesting, mowing, or herbicide treatment according to the manufacturer's instructions and cannot be tilled before excavating the topsoil so that the soil structure can be maintained (subparagraphs (a)5i and ii); bulky vegetation cannot be incorporated into the stockpiles and needs to be harvested or otherwise removed (paragraph (a)6); care is to be taken when moving, handling, and grading topsoil so as to avoid overhandling and compaction (subparagraphs (a)7i and ii); when feasible, stockpiles shall not be placed over prime farmland (paragraph (a)8); topsoil is to be managed to maintain soil structure to the maximum extent practicable (paragraph (a)9); soil smearing is to be avoided and, if smearing occurs, the soil is to be scarified in order to allow for water and air infiltration and exchange (paragraph (a)10); stockpiles are to be free of woody vegetation unless permitted in the rules (paragraph (a)11); as set forth at paragraph (a)12, depending on the goals of the farming operation, stockpiles shall be created as "low intensity" or

“moderate intensity,” and handled in accordance with N.J.A.C. 2:76-25A.5(b); if equipment travel over the stockpile is necessary for construction or maintenance of the stockpile, travel is to be limited to the minimum number of passes required and shall not increase soil dry bulk density above the values listed in the table, at paragraph (a)13, which was duplicated from the State’s standards for soil erosion and sediment control.

The performance criteria for low and moderate intensity soil stockpiles are established at N.J.A.C. 2:76-25A.5(b). Low intensity stockpiles are smaller in area than those of moderate intensity but do not grow a harvestable crop. For low intensity soil stockpiles: existing vegetation is to be removed before placing topsoil fill (subparagraph (b)1i); existing topsoil must be tilled or ripped to eliminate transition zones between the existing topsoil and the stockpile to be placed on the area (subparagraph (b)1ii); there is a maximum height for the stockpile of three feet above original grade (subparagraph (b)1iii); stockpile side slopes are to be no greater than 4:1, or 25 percent, so that the potential for erosion is reduced and to allow for routine mowing (subparagraph (b)1iv); when the topsoil will be stockpiled for more than 30 days, the stockpile must be seeded and mulched in accordance with the State’s standards for soil erosion and sediment control (subparagraph (b)1v). Moderate intensity stockpiles are lower in height than low intensity stockpiles, cover more land area, but may be cropped with hay. For moderate intensity stockpiles: existing vegetation is to be removed before placing topsoil fill (subparagraph (b)2i); existing topsoil must be tilled or ripped to eliminate transition zones between the existing topsoil and the stockpile to be placed on the area (subparagraph (b)2ii); topsoil is to be placed at a depth of no less than 12 inches and no more than 18 inches (subparagraph (b)2iii); stockpile side slopes are to be no greater than 6:1, or 17 percent (subparagraph (b)2iv); seeding is to be an appropriate long-term, deep-rooting perennial hay crop within 30 days (subparagraph (b)2v); during establishment of the stockpile, no harvesting can occur until the crop reaches a sufficient height so as

to ensure vigorous, deep roots.

The maintenance of topsoil stockpiles is set forth at N.J.A.C. 2:76-25A.5(c). N.J.A.C. 2:76-25A.5(c)1 requires that agronomic nutrient testing of the stockpile surface be completed as soon as the stockpile is constructed; dense vegetative cover is to be established and maintained on the stockpile within 30 days of final soil placement and grading, the stockpile shall be reseeded, when necessary, to maintain the dense cover, and there can be no tillage of the stockpile after initial establishment, unless expressly provided in the rules, according to N.J.A.C. 2:76-25A.5(c)2. Permanent vegetation on low intensity stockpiles must be mowed no lower than six inches and is to remain free of woody vegetation, unless otherwise specified in the rules, and equipment travel over the stockpiles shall be minimized, only occurring when the stockpile is significantly below field moisture capacity (paragraph (c)3); the permanent vegetation on moderate intensity stockpiles is to be mowed or harvested not less than four inches and shall be allowed to regrow at least 12 inches prior to subsequent harvests, care is to be exercised to avoid equipment traffic over the stockpile, hay bales cannot be stockpiled on the soil stockpile, and shall not be removed from the field unless the ground is significantly below field moisture capacity or the ground is frozen (paragraph (c)4); moderate intensity soil stockpiles can be tilled to establish a hay crop not more than once every five years, and seeding or overseeding of hay crops can occur at any frequency needed to maintain the hay (paragraph (c)5); trees, shrubs, and other woody vegetation cannot be planted or allowed to be established on topsoil stockpiles, unless approved by Committee resolution, and nursery stock cannot be established on the stockpiles (paragraph (c)6); signs are to be maintained on each stockpile preventing improper use, and the stockpiles cannot be used for various described activities at paragraph (c)7; all erosion rills forming on stockpiles must be addressed promptly by stabilization with seed and mulch or with biodegradable erosion control matting, if needed, to establish vegetation (paragraph (c)8).



N.J.A.C. 2:76-25A.6(a) provides that when minimum vegetative cover, as defined at N.J.A.C. 2:76-25.3, is maintained on temporary parking areas and temporary storage areas, those areas are deemed exempt agricultural practices as set forth at N.J.A.C. 2:76-25.4. N.J.A.C. 2:76-25A.6(b) recognizes that there may be circumstances beyond the grantor's reasonable control, such as soil type or extended weather conditions, affecting the ability to maintain minimum vegetative cover on those areas, in which case the Committee and/or grantee shall consider the factors listed at N.J.A.C. 2:76-25A.6(b)i through viii in determining whether those areas can be deemed exempt agricultural practices. N.J.A.C. 2:76-25A.6(c) sets forth the method by which vegetative cover is to be measured, by delineations of land use areas, determining soil type and topography through sampling within those areas, and the size of the measurement samples (subparagraphs (c)1i and ii); sample frequency and methodology (subparagraphs (c)2i through vi); use of the step-point method to estimate basal cover of grass (paragraph (c)3); and how to calculate points in each measurement area, with measurement areas having more than 70 points per acre (70 percent) of vegetation and/or crop residue not being considered degraded soil (paragraph(c)4). A visual depiction of the step-point method is included at the end of N.J.A.C. 2:76-25A.6(c).

Production waivers allowing additional soil disturbance up to a maximum of 15 percent of the premises or six acres, whichever is greater, can be obtained from the grantee and Committee on an expedited basis when a proposed construction project satisfies all of the criteria set forth at N.J.A.C. 2:76-25A.7(b) through (g). N.J.A.C. 2:76-25A.7(b)1i through iv preclude soil disturbance in environmentally sensitive and constrained areas and N.J.A.C. 2:76-25A.7(b)2 through 9, respectively, require that disturbed areas be minimized while meeting agronomic needs; prohibit deliberate mechanical soil compaction on the disturbed area; require low ground pressure equipment and/or

ground protection mats during construction on exposed soils; precludes disturbance within the dripline of any wooded areas, trees, or perennial crops outside the limit of disturbance; prohibit topsoil from being removed from the premises or being mixed with underlying subsoil; requires that all subsoil remain on the premises; requires that preparation of the proposed soil disturbance area can only occur when soil moisture within the limit of disturbance is at or below field capacity in order to avoid excessive rutting, the mixing of topsoil and subsoil, and to minimize soil compaction; and prohibits soil disturbance activities until the waiver has been approved by the grantee and the Committee.

N.J.A.C. 2:76-25A.7(c) contains maintenance requirements related to construction projects for which an expedited production waiver is sought. N.J.A.C. 2:76-25A.7(c)1 requires that erosion within, or downslope of, the disturbed area must be stabilized promptly, and if erosion occurs repeatedly within, or adjacent to, a disturbed area, additional conservation measures shall be adopted and implemented that meet USDA-NRCS planning criteria, and N.J.A.C. 2:76-25A.7(c)2 requires maintenance of soil stockpiles in accordance with N.J.A.C. 2:76-25A.5.

When a proposed project will cause soil compaction, applicable criteria that need to be complied with are itemized at N.J.A.C. 2:76-25A.7(d): compacted areas cannot have soil alteration or soil surfacing (paragraph (d)1); no topsoil or subsoil shall be removed or moved for the construction or use of the compacted area (paragraph (d)2); coarse organic mulch and/or ground protection mats must be used when practical, the grantor must plan and maintain a vegetated filter strip downstream of the compacted area, and the filter strip shall be maintained until rehabilitation of the compacted area (paragraph (d)3); and additional vegetated filter strips are to be planted at intervals within the compacted area to prevent concentrated flow erosion (paragraph (d)4).

Proposed projects utilizing ground-level surfaces must meet criteria established at N.J.A.C. 2:76-25A.7(e). Prior to installation of the ground-level surface, topsoil is to be removed, stockpiled, and

stabilized (paragraph (e)1); surfaced areas requiring additional grading are deemed soil alteration requiring compliance with N.J.A.C. 2:76-25A.7(g) (paragraph (e)2); surfaced areas are to be underlain with suitable permeable woven or non-woven geotextile fabric to prevent base or surface material from embedding in native soil, but allowing water infiltration, and there are standards for how the fabric is to be installed (paragraph (e)3); and at least six inches of appropriate permeable subbase is to be installed to distribute loads into the subsoil (paragraph (e)4). Criteria for additional surfacing above the subbase is set forth at N.J.A.C. 2:76-25A.7(e)5i through vi.

Proposed projects utilizing suspended surfaces must satisfy requirements at N.J.A.C. 2:76-25A.7(f) controlling rooftop runoff (paragraph (f)1); a stormwater management plan and design for any stormwater management facilities (paragraph (f)2); and for land beneath the suspended surface, compliance with the ground-level surface requirements at N.J.A.C. 2:76-25A.7(e) and soil protection measures (subparagraphs (f)3i through iii).

A grantor shall follow the criteria in N.J.A.C. 2:76-25A.7(g)1 through 7 when a waiver entails soil alteration. Prior to construction, topsoil is to be removed, stockpiled, and stabilized (paragraph (g)1); grading can only occur within the B soil horizon (paragraph (g)2); no grading can occur in lower soil horizons or in bedrock (paragraph (g)3); all subsoil must remain on site and either stockpiled or used as fill for the project, with subsoil stockpiles being stabilized with temporary control measures to prevent soil loss from wind or water erosion (paragraph (g)4); exposed soil must be permanently vegetated or otherwise stabilized within the first growing season (paragraph (g)5); for fill piles on site, including organic materials, soil amendments, construction materials, or long-term subsoil piles, the volume of material must be commensurate with the volume of materials needed for an agricultural purpose on the grantor's farm management unit, a nutrient management plan, or other applicable USDA-NRCS conservation practices shall be employed, and all imported material shall be free of asphalt, concrete,

stone, rubble, or other undesirable components, as determined by the Committee (subparagraphs (g)6i and ii); for organic fill piles such as mulch, compost, wood chips, manure, livestock bedding and leaves, a vegetated filter must be planted and maintained around the fill area, with maintenance occurring until the fill area is rehabilitated (paragraph (g)7). N.J.A.C. 2:76-25A.7(h) provides that if a deviation from the standard is necessary, then the grantor shall comply with the low impact disturbance design criteria at N.J.A.C. 2:76-25A.8.

Production waivers allowing additional soil disturbance up to a maximum of 15 percent of the premises or six acres, whichever is greater, can also be obtained from the grantee and Committee when a proposed construction project satisfies all of the low impact disturbance design criteria set forth at N.J.A.C. 2:76-25A.8(a). The requirements at N.J.A.C. 2:76-25A.5 for stockpiling topsoiling must be complied with (paragraph (a)1); to the maximum extent practicable, the existing soil profile shall be protected, and the soil's physical and chemical properties shall be maintained (subparagraphs (a)2i, ii, and iii); the natural land contours shall be maintained (subparagraph (a)2iv); the existing subsoil depth and thickness is to be retained (subparagraph (a)2v); the soil profile is to be kept free of gravel, foreign material, and debris (subparagraph (a)2vi); soil bulk density is to be kept within appropriate levels for plant growth (subparagraph (a)2vii); and practices are to be supported that maintain organic matter content (subparagraph (a)2viii). The proposed project must, to the maximum extent practicable, adhere to criteria for water: design the project to maintain existing topography (subparagraph (a)3i); prioritize nutrient management in any avoid-control-trap system (subparagraph (a)3ii); prioritize long-term maintenance of water management systems (subparagraph (a)3iii); avoid concentrating flows and disturbing constrained slopes (subparagraphs (a)3iv and v); employ practices that maintain or increase the infiltration rate of water (subparagraph (a)3vi); protect water flow through natural drainage areas (subparagraph (a)3vii); minimize impermeable surfaces (subparagraph (a)3viii); and maintain forest land

(subparagraph (a)3ix). N.J.A.C. 2:76-25A.8(a)4 states that for premises with forest lands, the health of those lands shall be maintained to the maximum extent practicable. The low impact disturbance criteria described above and supporting an application for a production waiver must be designed with an accompanying narrative by a technical service provider, a professional engineer, an NRCS-certified conservation planner, or another Committee-approved conservation planner, as set forth at N.J.A.C. 2:76-25A.8(a)4.

N.J.A.C. 2:76-25A.9 sets forth the requirements for an application, plan, and SADC certification of a soil rehabilitation project pursuant to N.J.A.C. 2:76-25.9. N.J.A.C. 2:76-25A.9(b) provides that the application and plan shall be prepared in accordance with an application document prepared by the Committee, with the plan meeting or exceeding criteria set forth at N.J.A.C. 2:76-25A.9(c)1 through 8. N.J.A.C. 2:76-25A.9(c)1i through vi, respectively, require that the plan demonstrate that: rehabilitation activities will be completed when soil moisture is sufficiently below field moisture capacity in order to avoid rutting and damage to soil structure; soil rehabilitation activities are to be timed for completion at the onset of the optimal seeding period to minimize the duration and area of exposure of bare soil to erosion; vegetative cover is to be established in accordance with the specified cover crop mixture or crop rotation immediately after rehabilitation activities; low ground-pressure equipment and/or ground protection matting shall be used during rehabilitation activities; various soil physical properties shall approximate or be more favorable for plant growth after soil rehabilitation than pre-disturbance conditions; the depth and quality of the rooting zone of the rehabilitated soil shall be equal to or greater than the pre-disturbance rooting zone or, if the pre-disturbance rooting zone depth is unknown, than equal to or greater than the pre-disturbance zone of a reference site.

N.J.A.C. 2:76-25A.9(c)2i through iv, respectively, are the criteria applicable when surfaces or structures are removed in connection with the soil rehabilitation project. N.J.A.C. 2:76-25A.9(c)2i

requires that all structures, surfaces, and associated materials and debris, including buried infrastructure, are to be removed in their entirety with the soil profile, although buried infrastructure below parent material may remain; demolished structures and surfaces shall be removed from the premises for disposal, reuse, or recycling, or retained on the premises for beneficial reuse if approved in the plan, pursuant to N.J.A.C. 2:76-25A.9(c)2ii; N.J.A.C. 2:76-25A.9(c)2iii states that removal of gravel or other surfacing must be completed in a manner that minimizes gravel mixing with soil and the compaction of soil, and removal equipment shall remain on the gravel or on ground protection mats during rehabilitation; after the removal of surfaces or structures, human made or processed artifacts such as concrete, glass, brick, or gravel shall be less than five percent by volume of the soil profile in each soil horizon, as set forth at N.J.A.C. 2:76-25A.9(c)2iv.

N.J.A.C. 2:76-25A.9(c)3 provides additional criteria for modified topography and soil profile reconstruction. Rehabilitated areas must be consistent with pre-disturbance land contours and any rehabilitated slope shall be within one percent of the pre-disturbance slope, as set forth at N.J.A.C. 2:76-25A.9(c)3i; N.J.A.C. 2:76-25A.9(c)3ii requires that final grading of reconstructed soil must provide for adequate surface draining; and N.J.A.C. 2:76-25A.9(c)3iv provides that the minimum depth of soil and/or substitute soil material to be reconstructed must be 48 inches or such other depth deemed necessary or appropriate by the Committee to restore pre-disturbance soil productivity.

N.J.A.C. 2:76-25A.9(c)4 sets forth criteria for subsoil replacement and/or grading. Subsoil is to be replaced at the same depth and thickness of the undisturbed soil, or of a similar reference if original depth and thickness are unknown (subparagraph (c)4i); if importation of subsoil is needed for rehabilitation, the imported subsoil must be certified as clean and records retained for submission with the final soil rehabilitation certification report (subparagraph (c)4ii); replacement subsoil must have similar physical characteristics as native subsoil unless the grantor can demonstrate that using soil with

similar physical characteristics will prohibit rehabilitation (subparagraph (c)4iii); subsoil must be tested for bulk density and decompaction (subparagraph (c)4iv); subsoil must be placed in lifts of not more than six inches, and excessive voids are to be removed prior to the placement of the additional subsoil (subparagraph (c)4v); subsoil is to be scarified before placing additional subsoil or topsoil layers, and reconstructed soil horizons must be deep-tilled with appropriate implements to ensure root penetration and that restrictive layers do not limited downward water percolation (subparagraph (c)4vi).

Criteria related to topsoil replacement and/or grading are set forth at N.J.A.C. 2:76-25A.9(c)5. N.J.A.C. 2:76-25A.9(c)5i, ii, and iii, respectively, require that replacement topsoil is to be applied to remediation area to a depth not less than that of the pre-disturbed soil, accounting for soil settling; topsoil shall not be removed from undisturbed portions of the farm to be utilized for the rehabilitation project; and replacement topsoil shall be sourced according to the order of preference at N.J.A.C. 2:76-25A.9(c)5iii(1), (2), and (3). N.J.A.C. 2:76-25A.9(c)5iv provides that replacement topsoil shall have properties similar to the pre-existing soil identified in the application, and N.J.A.C. 2:76-25A.9(c)5iv(1) and (2) contain detailed descriptions of the acceptable characteristics of the replacement topsoil.

N.J.A.C. 2:76-25A.9(c)5v(1) and (2) state that, prior to applying replacement topsoil, bulk density and decompaction testing within the subsoil must be undertaken, and the subsoil surface must be scarified to ensure root penetration and that restrictive layers do not limit downward water percolation. When placing replacement topsoil, N.J.A.C. 2:76-25A.9(c)5vi(1) and (2) require that soil handling be limited to the minimum necessary for replacement to maintain soil structure, and that additional topsoil is to be placed to allow for settling, so that the final depth of the replacement topsoil is equivalent to or greater than pre-disturbance conditions. N.J.A.C. 2:76-25A.9(c)5vii(1) through (3) state that, after final topsoil replacement, bulk density testing and decompaction must be completed and the criteria for soil testing and amendments and crop yield comparisons must be satisfied.

N.J.A.C. 2:76-25A.9(c)6 sets forth the criteria for bulk density testing and decompaction. N.J.A.C. 2:76-25A.9(c)6i requires that the soil must be tested in a least five locations per acre at the minimum rooting depth and at the surface for excessive compacting using soil test methods at subparagraph (c)6iii; N.J.A.C. 2:76-25A.9(c)6ii requires that rehabilitated soils must have bulk density values less than or equal to bulk density values in an undisturbed reference location and not more than those listed in the table set forth at N.J.A.C. 2:76-25A.5(a)13; the soil test methods are described at N.J.A.C. 2:76-25A.9(c)6iii; and N.J.A.C. 2:76-25A.9(c)6iv provides that if soil is determined to be above the maximum bulk density after testing, then the soil shall be tilled or scarified to the depth of compaction or to the minimum rooting depth, whichever is less, using described equipment, and that vegetative measures designed to loosen the soil may be utilized alone or in conjunction with other mechanized methods. As set forth at N.J.A.C. 2:76-25A.9(c)6v, after decompaction, soil density must be retested at least at the minimum rooting depth, the subsoil surface and the topsoil surface until compaction has been rehabilitated, and the Committee may require additional bulk density sampling within the soil profile for especially compacted soils.

Additional criteria for soil testing and soil amendments are set forth at N.J.A.C. 2:76-25A.9(c)7. Topsoil samples are to be collected after all grading, soil replacement, and decompaction has been completed, and five to 10 representative samples are to be collected across each rehabilitation area to create a composite mixture for testing at a rate of at least one soil test per disturbance within the rehabilitation area, with no less than one sample per three acres, as stated at N.J.A.C. 2:76-25A.9(c)7i. Soil sample collection must follow laboratory standards, and specific tests and parameters are set forth at N.J.A.C. 2:76-25A.9(c)7ii(1) and (2) depending on whether the rehabilitation project did or did not involve importing topsoil or creating substitute soil material. The Committee can require additional soil



tests necessary to prove the quality of imported topsoil or substitute soil material, as set forth at N.J.A.C. 2:76-25A.9(c)7ii(3). In accordance with N.J.A.C. 2:76-25A.9(c)7iii, iv, v, and vi, respectively, amendments shall be applied according to soil test results and from a Rutgers Cooperative Extension agent or similarly qualified agronomist or soil scientist; soil organic matter within the rehabilitation area is to be amended until organic matter content is equal to pre-existing conditions or, if pre-existing levels are unknown, to that of surrounding farm fields; topsoil is to be tilled to incorporate all necessary fertilizers and amendments using described equipment, and then seeded with a fast-growing cover crop until the next crop is planted; and once soil amendment is completed, criteria for crop yield comparisons must be satisfied.

Crop yield comparison criteria at N.J.A.C. 2:76-25A.9(c)8 require that a baseline be established for comparison using one or more of the methods at N.J.A.C. 2:76-25A.9(c)8i(1), (2), and (3), and the methods for how to determine post-rehabilitation crop yield are detailed at N.J.A.C. 2:76-25A.9(c)8ii(1) through (4). N.J.A.C. 2:76-25A.9(c)8iii provides that crop yield testing is successful when the five-year average yield is not less than 90 percent of the pre-recorded crop yields or county values, or when parallel crop yields are not less than 90 percent of the yields in the control fields for three of the five testing years. If crop yields fail to meet the minimum rehabilitation threshold after 10 years, the rehabilitation project will be considered unsuccessful and the land will continue to be counted towards the soil disturbance limit at N.J.A.C. 2:76-25.5.

N.J.A.C. 2:76-25A.9(d) describes the requirements after the rehabilitation activities and testing are completed. The grantor is to submit to the Committee and grantee, a final certification report with the following minimum contents set forth at N.J.A.C. 2:76-25A.9(d)1 through 6, respectively: records of interim certifications for each step in the approved rehabilitation sequence; comparisons of the pre-existing and rehabilitated soil properties; documentation of acceptable bulk density tests, a map

depicting approximate test locations, and date(s) of testing; if applicable, clean-fill certifications and source of soil; soil test results, including quantity and type of amendments; crop yield comparison, farming practices, sampling patterns and locations, and an as-built survey showing slopes if grading occurred.

The severability clause at N.J.A.C. 2:76-25A.10 states that the provisions at Subchapter 25A remain valid even if another part or other parts of the subchapter is or are declared illegal or unenforceable, for any reason, by a court of competent jurisdiction.

As the State Agriculture Development Committee has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

### **Social Impact**

The proposed new rules will have a positive social impact by clearly articulating the nature and permissible extent of soil disturbance on preserved farms. Preserved farm landowners will be able to make informed business decisions regarding their agricultural operations. The public will be assured that its investment in the farmland preservation program has resulted in permanent protection of soil resources on farmland by current and future generations of farmers.

### **Economic Impact**

The proposed new rules will have a positive economic impact. By defining the nature and permissible extent of soil disturbance pursuant to ARDA and the recorded deed of easement, preserved farm landowners will be better able to make informed business decisions regarding their farm

operations and have confidence that their agricultural development, if conducted in accordance with the regulations, will not result in deed of easement enforcement actions.

### **Federal Standards Statement**

A Federal standards analysis is not required because there are no Federal standards or requirements applicable to the proposed new rules.

### **Jobs Impact**

The proposed new rules will have some impact on jobs in New Jersey. The Committee anticipates an increase in jobs for professional engineers, soil scientists, and farm conservation planners as a result of the proposed new rules.

### **Agriculture Industry Impact**

The proposed new rules will have a positive impact on the agriculture industry. By defining the nature and permissible extent of soil disturbance pursuant to ARDA and the recorded deed of easement, preserved farm landowners will be better able to make informed business decisions regarding their farm operations and have confidence that their agricultural development, if conducted in accordance with the regulations, will not result in deed of easement enforcement actions.

The proposed new rules will have a positive impact on the agriculture industry by ensuring that productive farmland soils are preserved for future preserved farm landowners for a variety of agricultural uses. The rules provide substantial flexibility to preserved farm landowners. The rules contain a number of specifically identified common farm practices and conservation measures that are exempt from the soil disturbance limit; allow for the designation of additional exemptions by the

Committee upon approval of requests by the landowner or the holder of the farmland preservation deed of easement; authorize all preserved farms the ability to increase soil disturbance through an allowance of additional soil disturbance equal to two percent or one acre, whichever is greater, over disturbances existing on the preserved premises as of July 1, 2023; and a production waiver allowing additional soil disturbance from the prescribed limit of 12 percent or four acres of preserved farmland, whichever is greater, to 15 percent or six acres, whichever is greater, so long as prescribed conservation measures are undertaken over the preserved premises. The proposed new rules provide preserved farm landowners with innovation waivers, also accompanied by the requirement for conservation practices over the preserved premises, allowing for additional disturbance beyond the prescribed soil disturbance limit and the production waiver limit, thus allowing the agriculture community to engage in innovative techniques to facilitate agricultural production on preserved farms in a way that does not negatively affect the agricultural soil and water resources on the farm for future generations of farmers.

### **Regulatory Flexibility Analysis**

The Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. (RFA), requires that a notice of proposal of rules that impose reporting, recordkeeping, or other compliance requirements on small businesses include an analysis describing the requirements and costs imposed, and the methods used to minimize any adverse economic impact, on small businesses. A small business is any business that is resident in New Jersey, independently owned and operated, and not dominant in its field, which employs fewer than 100 full-time employees.

The proposed new rules will apply to all of the approximately 2,900 preserved farm properties in this State, a majority of which, the SADC estimates would be considered small businesses. Additionally, many individuals and entities own and/or operate more than one preserved farm as part

of a larger commercial agricultural operation. The SADC is unable to quantify with certainty the number of individuals and entities owning and/or operating preserved farms that are small businesses as defined in the Act. However, as noted below, the proposed new rules have been designed to have no, or minimal, economic impact on the overwhelming majority of preserved farms, and the rules contain various exemptions and relief mechanisms.

The SADC's mapping analyses of the 2,902 preserved farms reflects that the average disturbance per farm across the program is just over one acre, or 1.35 percent of the average sized farm. Approximately 90 percent of farms have utilized less than 25 percent of their soil disturbance allocation and 96.5 percent of farms have used less than one-half of their allocation; consequently, these farms' agricultural operations will likely not be affected by the proposed soil disturbance limit of 12 percent or six acres, whichever is greater at any time in the foreseeable future. Those farms will have substantial opportunity to grow their operations without approaching the regulatory limits. The remaining 3.5 percent of farms have used at least 50 percent of their allocation, of which 2.6 percent are eligible to apply for a production waiver of up to 15 percent/six acres and one percent are over the production waiver limit.

For these farms near or over the production waiver limit, the proposed new rules will likely have an effect on landowners' ability to expand their disturbance footprint. To enable all landowners the ability to grow, despite the extent of disturbance existing as of July 1, 2023, the rules allow landowners to apply for an additional one acre or two percent disturbance allocation to enable modest additional development potential over the existing condition of the farm.

The proposed new rules do not require preserved farm owners or operators to file reports or to maintain records, as reporting and recordkeeping will be the responsibility of the counties, nonprofit organizations, or the SADC that monitor those farms as the grantees under the farmland preservation

deeds of easement.

The overwhelming majority of preserved farms will have no initial or annual compliance costs because, as stated above, those preserved farms have no or minimal existing soil disturbance. Those few farms that wish to exceed the 12 percent/six acre soil disturbance limit may incur costs to obtain waivers, or to avail themselves of the rule allowance of an additional two percent or one acre, if professionals such as engineers, soils experts, and resource conservationists are hired. The USDA-NRCS offers free services for conservation plans, and the Federal government provides grants to preserved farm landowners to partially defray the costs of installing conservation measures. Farms near, at, or exceeding the 12 percent-/four-acre limit are already substantial operations that likely have ongoing business relationships with such professionals. The SADC cannot accurately estimate compliance costs for waivers or for soil rehabilitation, which will vary depending on business size, project complexity, and site conditions.

### **Housing Affordability Impact Analysis**

The proposed new rules will not result in a change in the affordability of housing or the average cost associated with housing. The proposed new rules will have no impact on any aspect of housing because the proposed new rules deal with the nature of permissible limits on soil disturbance on farmland preserved in accordance with ARDA by a recorded deed of easement.

### **Smart Growth Development Impact Analysis**

The proposed new rules will not result in a change in housing production within Planning Areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan. This is because the proposed new rules have nothing to do with housing production, either within Planning

Areas 1 or 2, within designated centers, or anywhere else in the State of New Jersey. The proposed new rules deal with the nature of permissible limits on soil disturbance on farmland preserved in accordance with ARDA by a recorded deed of easement.

The proposed new rules will have a positive impact on smart growth by protecting agricultural soil resources and allowing preserved farm landowners to make more informed investment decisions regarding their agricultural operations, thus strengthening the long-term viability of farms located primarily in Planning Areas 4 and 5 under the State Development and Redevelopment Plan.

### **Racial and Ethnic Community Criminal Justice and Public Safety Impact**

The SADC has evaluated this rulemaking and determined that it will not have an impact on pretrial detention, sentencing, probation, or parole policies concerning adults and juveniles in the State. Accordingly, no further analysis is required.

**Full text** of the proposal follows:

#### SUBCHAPTER 25. SOIL DISTURBANCE ON PRESERVED FARMLAND

##### 2:76-25.1 Applicability

This subchapter applies to premises subject to farmland preservation deed restrictions recorded pursuant to the Agriculture Retention and Development Act, P.L. 1983, c. 32 (N.J.S.A. 4:1C-11 et seq.), and enrolled in the State's farmland preservation program.

##### 2:76-25.2 Purpose

The purpose of this subchapter is to define what activities on the premises constitute soil disturbance and to establish a soil disturbance limitation. Exceeding the soil disturbance limitation established in this subchapter shall constitute a violation of the deed of easement, which prohibits activities detrimental to soil conservation and detrimental to the continued agricultural use of the premises in accordance with N.J.A.C. 2:76-6.15(a)7.

### 2:76-25.3 Definitions

The following words and terms, as used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

“Actively cropped” means land on portions of the premises that is available for agricultural use and production where the following apply: crops or forages are grown directly in the soil profile for a minimum of 150 consecutive days in one calendar year or for two periods of not less than 90 consecutive days each in one calendar year, and annual crops and hay are harvested, or perennial crops other than hay are maintained annually, or forages are consumed by direct grazing, or cover crops are grown as part of a production rotation, which are included in a farm conservation plan.

“Agricultural productivity” means the capacity of a soil to produce a specified plant or sequence of plants under a physically defined set of management practices as measured in terms of inputs of production factors in relation to outputs or yields.

“Bulk density” means the dry weight of soil divided by its volume.

“Committee” means the State Agriculture Development Committee.

“Contiguous premises” means adjacent properties, even if they are separated by human-made barriers or structures or legal boundaries. Contiguous premises shall include, but are not limited to,



land areas which directly abut or are separated by a general access roadway or other rights-of-way, including waterways.

“Cover crop” means an annual or perennial crop consisting of a specific plant or mix of plants that are planted and grown primarily to improve soil quality by reducing soil compaction, increasing soil organic matter content, trapping or producing nitrogen, or reducing soil erosion.

“Cranberry bog,” also known as a cranberry bed, means a naturally acidic bog that has been drained, cleared, leveled, and covered with sand and includes appurtenant canals and earthen dikes for purposes of cultivating cranberry varieties developed from the native species *Vaccinium macrocarpon*.

“Deep tillage” means performing tillage operations below the normal tillage depth in a manner consistent with an approved farm conservation plan to modify adverse physical or chemical properties of a soil that inhibit plant growth, such as, but not limited to, compacted layers formed by field operations, restrictive layers, such as cemented hardpans in the root zone, overwash or deposits from wind and water erosion or flooding, or contaminants in the root zone. “Deep tillage” does not include elevation or topography change.

“Development easement” means an interest in land, less than fee simple absolute title thereto, which enables the owner to develop the land for any nonagricultural purpose as determined by and acquired pursuant to the provisions at N.J.S.A. 4:1C-11 et seq., P.L. 1983, c. 32, and any relevant rules promulgated pursuant thereto. A development easement is conveyed by a deed of easement.

“Existing agricultural water impoundment” means an excavated, unlined farm pond, or dammed impoundment fed by surface water or groundwater for irrigating agricultural crops or watering livestock that is reflected in the baseline map established pursuant to N.J.A.C. 2:76-25.10.

Agricultural water impoundments shall not include other types of water-related structures including, but not limited to, decorative or recreational ponds, wildlife ponds, stormwater management facilities, aquaculture ponds, pools, manure lagoons, tailwater recovery ponds, ponds constructed primarily for hydropower uses, or naturally occurring ponds and wetlands but not including existing open ditches, as that term is defined in this subchapter. Associated berms or dams are considered soil alteration or soil surfacing.

“Existing open ditch” means a vegetated, unlined canal, ditch, open drain, conveyance swale, or similar structure used to convey water that is reflected in the baseline map established pursuant to N.J.A.C. 2:76-25.10 and may be associated with an existing agricultural water impoundment or utilized to convey runoff from crop fields or underground drainage systems.

“Farm conservation plan” has the same meaning as that term is defined at N.J.A.C. 2:76-2A.7.

“Field moisture capacity” means the amount of water retained in a soil after it has been saturated and has drained freely, expressed as a percentage of the oven dry weight of the soil.

“Field Office Technical Guide” or “FOTG” means United States Department of Agriculture Field Office Technical Guide, incorporated herein by reference, as amended and supplemented, and available at <https://efotg.sc.egov.usda.gov/#/state/NJ/documents>.

“Forest land” means a portion of the premises covered with a large and thick collection of growing trees of at least five contiguous acres in size and not less than 120 feet wide. Forest land does not include land devoted to the production of Christmas trees, nursery stock, orchard, or similar areas where trees are primarily grown to harvest their fruits, nuts, stems, or flowers.

“Forest stewardship plan” has the same meaning as that term is defined at N.J.A.C. 7:3-1.3.

“Geotextile fabric” means a permeable, woven or non-woven, plastic fabric typically used for separation of soil layers, erosion control, and weed management, but does not include biodegradable or paper fabrics.

“Geotextile field” means an area that has been covered with geotextile fabric for purposes of agricultural or horticultural production in which the fabric is placed over native soil that has not undergone soil alteration, soil surfacing, or soil compaction, but may be top-dressed with organic mulch.

“Grantee” means the entity to which the development easement was conveyed.

“Grantor” means the owner who conveyed the development easement, their heirs, executors, administrators, personal or legal representatives, successors, and assigns.

“Ground-level surface” means a surface placed in contact with the soil and includes, but is not limited to, flooring, paving, asphalt, asphalt millings, reinforced concrete, recycled concrete, porous asphalt, porous concrete, stone, rock, gravel, pavers, bricks, block, rubber, sand, cinders, construction mats, pond liners, and non-topsoil stockpiles.

“Hoophouse” means an individual temporary agricultural structure that is used exclusively for the production and storage of live plants by protecting them from the sun, wind, excessive rainfall, or cold, or to extend the growing season. A hoophouse is constructed of a metal, wood, or durable plastic frame covered with polyethylene, polycarbonate, plastic, or fabric material and does not have a permanent foundation, footings, ground-level surface, or anchoring system. The frame and exterior covering may or may not be removed during the growing season. “Hoophouse” includes structures commonly known as “high tunnel,” “low tunnel,” “temporary greenhouse,” or “polyhouse.”

“Human-altered and human-transported soils” also known as anthropogenic soils, means soils that have profound and purposeful alteration or occur on landforms with purposeful construction or

excavation and the alteration is of sufficient magnitude to result in the introduction of a new parent material (human-transported material) or a profound change in the previously existing parent material (human-altered material). Human-altered and human-transported soils do not include soils with incidental or unintentional surficial changes due to exempt agricultural practices.

“Innovation waiver” means a waiver that allows the grantor to implement a new or innovative agricultural practice that is not otherwise considered exempt pursuant to N.J.A.C. 2:76-25.4 and which, if approved by the Committee in advance, shall not count towards the soil disturbance limit set forth at N.J.A.C. 2:76-25.5.

“Limit of disturbance” means a clearly delineated area around a proposed area of disturbance authorized pursuant to a waiver, inside which all construction-related activities occur, including, but not limited to, site preparation, grading, equipment traffic, construction, and staging. Existing disturbed areas are not part of the limit of disturbance.

“Livestock confinement area” includes feedlots, cow yards, dry lots, and exercise yards used exclusively for livestock.

“Livestock training area” means an uncovered, outdoor area of the premises used for riding, racing, training, showing, or rehabilitating livestock. Examples include, but are not limited to, arenas, tracks, and training rings.

“Maximum dry bulk density” has the same meaning as that term is defined at N.J.A.C. 2:76-25A.3.

“Minimum rooting depth” means at least 40 inches or a lesser depth equal to the depth to a subsurface layer in the natural soil profile that inhibits or prevents root penetration.

“Minimum vegetative cover” means vegetative cover of at least 70 percent for at least nine months per calendar year measured pursuant to the procedures set forth at N.J.A.C. 2:76-25A.6.

“NRCS” means the Natural Resources Conservation Service, an agency of the United States Department of Agriculture providing technical assistance for the conservation of agricultural and related natural resources.

“Nominal smoothing” means the movement of topsoil to reduce irregularities from the soil surface that does not alter the elevation of the existing ground surface more than three inches from the original pre-existing natural landform.

“Nominal tent” means a tent that covers up to 2,000 square feet of the premises for any length of time. Nominal tents may be comprised of multiple tents or the first 2,000 square feet of a larger tent.

“Normal tillage” means generally accepted agricultural practices for seedbed preparation and cultivation of soil including moldboard plowing, disking, chisel plowing, hill and furrow plowing, bed shaping, and the use of similar site preparation practices as determined by the Committee, where the practice does not meet the definition of human-altered and human-transported soils. Normal tillage is limited to the depth of the topsoil layer.

“On-farm utilities” means buried electric, sewer, water, gas, or communication lines, or similar utilities that serve residential units, agricultural labor housing, farm buildings, or other permitted uses on the premises, and installed in compliance with the on-farm utilities construction standards established at N.J.A.C. 2:76-25A.4. On-farm utilities do not include utilities installed for the purpose of supplying resources for, or being interconnected with, off-farm utility demand or generation.

“Organic” means a material derived from living matter such as leaves, crop residues, or compost.

“Organic mulch” means a material consisting exclusively of organic material used for weed control, moisture retention, landscaping, travel paths, livestock bedding, soil-compaction alleviation,

or as a soil amendment, that is composed of tree bark, wood chips, straw, pine straw, grass clippings, leaves, compost, manure, coconut fibers, or similar materials, and applied at a depth capable of being incorporated into the soil profile without diminishing soil productivity. Organic mulch does not include rubber mulch or materials with synthetic fibers, oils, or other inorganic substances added.

“Parking area” means an area used for vehicular parking that does not meet the definition of a travel lane or storage area. A parking area encompasses parking spaces and the aisles used to connect to travel lanes. Parking areas are delineated by roads, travel lanes, fences, or otherwise delineated by land use and vegetative cover.

“Parking structure” means any fence, barrier, bollard, parking aid, traffic control device, lighting fixture, or similar structure that is installed to manage vehicular traffic and limits or prohibits normal harvesting or tillage activities. Temporary traffic control devices, such as wooden stakes, fiberglass reflective rods, rope, and traffic cones that are installed only during a farm event and removed at the event’s completion are not considered parking structures. Agricultural fencing whose primary purpose is to contain livestock or exclude wildlife and generally follows the field perimeter is not considered a parking structure.

“Permeable” means a material or surface treatment that allows the passage of water into the soil at a rate equal to, or greater than, the surrounding surface soils, or that allows the passage of water into the soil at a rate equal to or greater than the saturated hydraulic conductivity for the soil type identified in the soil survey.

“Planning criteria” means the United States Department of Agriculture National Resource Concern List and Planning Criteria, incorporated herein by reference, as amended and supplemented, at <https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=45689.wba>.

“Premises” means the property under easement that is defined by the legal metes and bounds description in the deed of easement.

“Production waiver” means a waiver that allows the grantor to exceed the soil disturbance limits established at N.J.A.C. 2:76-25.5, up to a maximum of 15 percent of the premises or six acres, whichever is greater.

“Riparian zone” has the same meaning as the term that is defined at N.J.A.C. 7:13-1.2.

“Saturated hydraulic conductivity” means a quantitative measure of a saturated soil’s ability to transmit water when subjected to a hydraulic gradient.

“Soil alteration” means human-altered and human-transported soils and includes soil movement, grading, leveling, importation, exportation, cut, and fill, but does not include normal tillage or deep tillage.

“Soil compaction” means any activity other than normal tillage that results in an increase in soil dry bulk density above the root limiting levels, or in the consolidation of or a reduction in a soil’s capacity to infiltrate and percolate water. The causes of soil compaction include, but are not limited to: static force, tamping, vibration, kneading, and rolling techniques. Examples of preparing or using land that result in soil compaction include, but are not limited to: footings, foundations, earth-retaining structures, parking areas, storage areas, travel lanes, or the placement of engineered structures.

“Soil disturbance” means soil alteration, soil surfacing, or soil compaction.

“Soil horizon” means a layer within a soil profile differing from layers of soil above and below it in one or more of the soil morphological characteristics including color, texture, coarse fragment content, structure, consistency, and presence of redoximorphic features.

“Soil profile” means a vertical cross-section of soil showing the characteristic horizontal layers or soil horizons, which have formed as a result of the combined effects of parent material, topography, climate, biological activity, and time.

“Soil surfacing” means a human-made or human-placed covering over the soil including both suspended surfaces and ground-level surfaces unless identified by the Committee as an exempt agricultural practice.

“Solar energy facilities” has the same meaning as that term is defined at N.J.A.C. 2:76-24.3.

“Solar panels” means photovoltaic panels that are mounted to the ground by a screw, piling, or similar system that does not require a footing, concrete, or other permanent mounting and that are part of a solar energy facility meeting the criteria at N.J.A.C. 2:76-25A.4.

“Stewardship conservation plan” means a farm conservation plan that meets or exceeds the planning criteria for all soil and water resources identified on the premises.

“Stockpile” means a pile of any material located on the premises for more than 120 cumulative days in a 12-month period. Stockpiles include, but are not limited to, subsoil, sand, manure, leaves, wood chips, compost, building materials, gravel, road surfacing materials, timber, and metal.

“Storage area” means an area of land not in crop production used for the storage of equipment or other farm-related items, but not otherwise meeting the definition of a parking area or travel lane.

“Subsoil” means the layer of soil immediately beneath the topsoil where there is visibly less organic matter and root development than the topsoil layer, typically noticed by a change in soil color.

“Substitute soil material” means soil that has been created from a blend of basic components to have equivalent physical, chemical, and biological properties as the native soil.



“Suspended surface” means a surface placed above the soil and includes, but is not limited to, trailers, greenhouses, run-in sheds, pavilions, open-floored arenas, decks, and roofs of buildings.

“Technical service provider” means a private individual or entity certified by the NRCS as capable of providing technical service activities according to NRCS standards and specifications for specific conservation activities.

“Temporary geomembrane” means an impermeable plastic film used for a variety of agricultural uses including, but not limited to, plastic mulch and silage wraps, which are typically removed annually.

“Temporary ground protection mats” means construction mats consisting of wood (not including plywood), plastic, or metal that are specifically designed to distribute heavy loads to reduce soil compaction and that are in place for less than 120 cumulative days per calendar year.

“Temporary movable structure” means a structure that is removed from the premises without demolition, and which does not have a permanent foundation, floor, or anchoring system and is in place for no more than 120 cumulative days in a 12-month period. Temporary movable structures include, but are not limited to, office trailers, portable trailer-mounted-bathrooms, portable toilets, horse trailers, food carts, campers, and similar structures.

“Temporary parking area” means an actively cropped area used seasonally or periodically for public parking of vehicles related to the operation of the farm and which maintains minimum vegetative cover. Temporary parking areas do not contain parking structures.

“Temporary storage area” means an area utilized for the storage of infrequently used farm equipment or privately owned equipment associated with permissible farm activities and which maintains minimum vegetative cover.

“Temporary tent” means a tent in place on the premises for less than 120 cumulative days in a calendar year.

“Tent” means a temporary structure with an impermeable covering to provide shelter. It is also known as a tensioned membrane structure or canopy. A tent does not have a permanent foundation, footing, floor, or anchoring systems. A hoophouse is not a tent.

“Topsoil” means the uppermost layer in a natural or cultivated soil profile where cultivation, root growth, biological activity, and organic matter are concentrated. Topsoil is composed of mineral particles (sand, silt, and clay) and organic material, and allows for air exchange and water retention. Topsoil is also known as the “plow layer,” “surface soil,” “Ap layer,” “Ap horizon,” or the “surface layer.” Topsoil depth is site-specific, but typically varies between six and 12 inches.

“Topsoil stockpile” means a stockpile of topsoil constructed in accordance with N.J.A.C. 2:76-25A.5.

“Travel lane” means a generally linear feature on a farm primarily used for the conveyance of vehicles, pedestrians, livestock, and/or equipment.

“Underground drainage system,” also known as “drain tile,” means a subsurface drainage system made of conduit, such as corrugated plastic tubing, tile, or pipe, installed beneath the ground surface to collect and/or convey drainage water to improve farming conditions.

“Unimproved travel lane,” also known as a “farm lane,” means a travel lane that is not more than 10 feet wide for one-way traffic or 16 feet wide for two-way traffic, measured from the outside of the tire tracks, plus an additional two-foot allowance per side for a shoulder, that has not been surfaced, and is not constructed closer than 300 feet to another unimproved travel lane, or travel lane.

“USDA” means the United States Department of Agriculture.

“Vegetative cover” means living plant cover or intact residues but does not include weeds.

“Unimproved livestock area” means a livestock training area or livestock confinement area that has not been surfaced or subjected to soil alteration.

“Weed” means a plant that is not grown deliberately or is otherwise prohibited, invasive, or noxious. Examples of weeds include, but are not limited to, plantain, thistle, burdock, garlic mustard, and ground ivy.

#### 2:76-25.4 Exemptions

(a) The following agricultural practices shall not constitute soil disturbance for purposes of determining compliance with the soil disturbance limitation set forth at N.J.A.C. 2:76-25.5, and shall be considered exempt agricultural practices:

1. Cranberry bogs/beds;
2. Deep tillage;
3. Existing open ditches;
4. Existing agricultural water impoundments;
5. Geotextile fields;
6. Hoopouses, including those placed on geotextile fields, without soil alteration, soil surfacing, or soil compaction;
7. Normal tillage;
8. Nominal smoothing;
9. Nominal tents;
10. On-farm utilities;
11. Organic mulch;

12. Rehabilitated soils;
13. Solar panels;
14. Temporary geomembranes;
15. Temporary ground protection mats;
16. Temporary movable structures;
17. Temporary parking areas;
18. Temporary storage areas;
19. Temporary tents;
20. Topsoil stockpiles;
21. Underground drainage systems;
22. Unimproved livestock areas; and
23. Unimproved travel lanes.

(b) Conservation practices meeting the criteria in this subsection shall not constitute soil disturbance for the purpose of determining compliance with the soil disturbance limitation set forth at N.J.A.C. 2:76-25.5, when the conservation practice:

1. Is required to address runoff or erosion resulting from normal tillage;
2. Is planned and installed in accordance with the planning criteria and conservation practice standards developed by the NRCS;
3. Has a positive conservation effect under section 5 of the FOTG for one or more of the following resource concerns:
  - i. Sheet and rill erosion;
  - ii. Wind erosion;
    - (a) Ephemeral gully erosion;

- iv. Classic gully erosion;
- v. Bank erosion from streams, shorelines, or water conveyance channels; or
- vi. Compaction;

- 4. Is designed to minimize excavation, cuts, and fills;
- 5. Ensures that all topsoil shall be stripped and reapplied in accordance with the topsoil stockpiling standard at N.J.A.C. 2:76-25A.5;
- 6. Does not utilize suspended surfaces or ground-level surfaces and maintains minimum vegetative cover;
- 7. Is included in a farm conservation plan approved by the local soil conservation district and NRCS prior to installation;
- 8. Is installed under the supervision of a licensed professional engineer, the Committee, a technical service provider, or NRCS; and
- 9. Is subject to the submission of an as-built design certifying the conservation practice, as implemented, which meets or exceeds NRCS standards, and which is provided to the Committee and the grantee.

(c) A conservation practice may also be considered exempt, if the Committee finds that the water and erosion control measure meets the criteria at (b)2, 3, 4, 5, 7, 8, and 9 above, and is necessitated by factors beyond the control of the grantor including, but not limited to, natural weather conditions or drainage coming from off the farm, such as stormwater from public roads and/or adjacent properties.

(d) Conservation practices, including stormwater management facilities, required to address runoff or erosion resulting from soil disturbance activities or from exempt agricultural practices set forth at

this section, excluding normal tillage, shall not be considered exempt from the soil disturbance limitations at N.J.A.C. 2:76-25.5.

(e) The Committee, on its own or at the request of a grantor or grantee, may designate additional exempt agricultural practices by rule.

1. In considering the adoption of additional exempt agricultural practices, the Committee may consult with the following agencies, organizations, or persons:

- i. The New Jersey Department of Agriculture;
- ii. The New Jersey Agricultural Experiment Station, including appropriate county agents;
- iii. County agriculture development boards;
- iv. The State Soil Conservation Committee;
- v. Any other states' departments of agriculture, land grant institutions, or agricultural experiment stations;
- vi. The United States Department of Agriculture, or any other Federal governmental entity; or
- vii. Any other organization or person that may provide expertise concerning the particular practice.

(f) Exempt agricultural practices shall not violate any other provision of the deed of easement.

(g) Soil disturbance created solely as a result of other property interests in the premises superior in title to the farmland preservation easement, such as utility easements and road rights-of-way, shall not constitute soil disturbance for the purposes of determining compliance with the soil disturbance limitations set forth at N.J.A.C. 2:76-25.5.

#### 2:76-25.5 Soil disturbance limitations

(a) Soil disturbance may occupy up to 12 percent of the premises or four acres, whichever is greater.

- (b) If a grantor does not elect to use the soil disturbance calculation provided at (a) above, the grantor may seek permission from the Committee to increase the extent of soil disturbance on the premises over and above the total soil disturbance existing on the premises as of July 1, 2023, in an amount totaling an additional two percent of the premises, or one acre, whichever is greater.
1. The grantor is eligible for an allocation of an additional two percent or one acre of disturbance if the grantee and Committee determine that:
    - i. The premises complies with the farmland preservation deed of easement; and
    - ii. The disturbance proposed on the premises exceeds the soil disturbance limitation pursuant to (a) above.
  2. The Committee shall utilize the soil disturbance base map issued to the grantor pursuant to N.J.A.C. 2:76-25.10 or, if applicable, the amended base map established pursuant to N.J.A.C. 2:76-25.10(e), as the basis upon which the additional two percent or one acre, whichever is greater, shall be calculated.
  3. The Committee shall issue a final decision on the grantor's request to increase the extent of soil disturbance on the premises over and above the total soil disturbance existing on July 1, 2023, totaling an additional two percent of the premises, or one acre, whichever is greater.
- (c) In calculating the permissible soil disturbance limit, acreage shall be rounded to three decimal places (0.000).
- (d) Once an area of the premises has been disturbed, it will continue to be considered soil disturbance unless and until the Committee determines that the area has been successfully rehabilitated in accordance with N.J.A.C. 2:76-25.9 and 25A.9.
- (e) Activities occurring within the footprint of areas already considered disturbed will not be counted as additional soil disturbance.

- (f) Soil disturbance located outside the boundaries of the premises, including, but not limited to, severable and non-severable exception areas, residential exclusion areas, and any other area(s) of a farm not subject to the terms and conditions of the deed of easement, shall not count towards the limitation set forth at (a) above.
- (g) Removal of topsoil from the premises is expressly prohibited, except as directly related and incidental to the harvesting of agricultural and horticultural products, such as in soil that is removed with roots when sod is harvested.

#### 2:76-25.6 Waivers

- (a) Upon the approval of both the Committee and grantee, a grantor may receive a waiver or waivers of the soil disturbance limitation pursuant to N.J.A.C. 2:76-25.5. The grantor may apply for one or both types of the following waivers:
1. A production waiver, which shall allow additional soil disturbance to a maximum limit of 15 percent of the premises or six acres, whichever is greater, provided the grantor meets all the eligibility criteria and conditions set forth at (b), (c), and (d) below and the disturbance proposed on the premises exceeds the soil disturbance limitation at N.J.A.C. 2:76-25.5; and/or
  2. An innovation waiver, which shall allow additional soil disturbance beyond the limits established pursuant to N.J.A.C. 2:76-25.5 and the production waiver limit at (a)<sup>1</sup> above, provided the grantor meets all the eligibility criteria and conditions at (b), (c), and (e) below.
- (b) A grantor shall be eligible to apply for a waiver pursuant to this section if the grantee and Committee determine that the premises complies with the farmland preservation deed of easement.



(c) For a grantor to be eligible for either waiver pursuant to (a) above, the proposed project shall meet the following conditions, as determined by the grantee and the Committee:

1. There is no apparent feasible alternative to a proposed project resulting in soil disturbance on the preserved farm beyond the limitation pursuant to N.J.A.C. 2:76-25.5, which would avoid or substantially reduce the proposed soil disturbance;
2. It is not feasible to utilize areas of existing soil disturbance that would provide sufficient land area for the proposed use, nor is it feasible to implement a certified rehabilitation project on the premises pursuant to N.J.A.C. 2:76-25.9, which, once completed, would render the need for a waiver unnecessary;
3. The proposed project:
  - i. Has an exclusively agricultural or horticultural production purpose;
  - ii. Has a positive impact on agricultural productivity on the premises;
  - iii. Is compliant with relevant Federal and State laws and rules; and

(b) Does not cause a measurable, negative impact on or off the premises to any of the following:

  - (1) Drainage;
  - (2) Flood control, including stormwater runoff quantity;
  - (3) Water conservation, including groundwater recharge;
  - (4) Erosion control, including runoff quality; and
  - (5) The continued agricultural use of the premises for a variety of agricultural operations; or
  - v. Does not cause soil contamination;

4. The grantor has obtained, and the Committee has approved, a stewardship conservation plan for the premises.

i. The stewardship conservation plan shall maintain the functional integrity of vegetation in the riparian zone.

ii. For the purposes of meeting the planning criteria for sheet and rill erosion, the following shall apply:

(1) Soil attached to crops at harvest shall be excluded from the soil loss calculation; and

(2) Soil loss shall be averaged over a crop rotation period not to exceed five years;

5. The grantor has obtained a forest stewardship plan for all forest land on the premises; and

6. The grantor provides a long-term maintenance plan for conservation measures associated with the proposed disturbance.

(d) A grantor shall be eligible for a production waiver if the grantee and Committee, in addition to (b) and (c) above, determine all the following conditions are met:

1. All site preparation, grading, equipment traffic, construction, and staging is confined to a specified limit of disturbance area or area of existing disturbance; and

2. The project design adheres to one or more the following sets of standards and criteria, as determined by the Committee:

i. Construction standards for expedited production waivers pursuant to N.J.A.C. 2:76-25A.7;

or

ii. The low impact disturbance design criteria pursuant to N.J.A.C. 2:76-25A.8.

(e) A grantor shall be eligible for an innovation waiver if the grantee and Committee, in addition to (b) and (c) above, determine all the following conditions are met:

1. The project:

- i. Maintains minimum vegetative cover;
  - ii. Does not cause the maximum dry bulk density of the soil to increase beyond the limit identified pursuant to N.J.A.C. 2:76-25A.9(c)6ii; and
  - iii. Does not cause any soil resource concerns, including soil alteration; and
2. Any soil surfacing proposed can be deployed and readily removed without causing negative impacts to all soil resources, including topsoil.
- (f) An application for a waiver shall be filed with the Committee, and the Committee shall provide the grantee, if applicable, a copy of the application.
1. The Committee shall, within 30 days of receipt of the application, provide written notice to grantor and grantee, if applicable, whether the application is complete or incomplete. If incomplete, the notice shall specify the missing information.
  2. If the application is incomplete, the grantor shall have 120 days from receipt of the notice of incompleteness to provide the Committee with any missing information.
  3. The grantee shall take no action on the request for a waiver until the grantee receives copies of the complete application and all supporting materials from the Committee.
- (g) Within 30 days of receipt of written notice from the Committee that the application is complete, the grantor shall provide written notice of the application, at the grantor's sole expense, through certified mail, return receipt requested, and/or by personal service, to:
1. The clerk and land use board secretary of the municipality in which the premises is located. If the premises is located within 200 feet of an adjoining municipality, then written notice of the application shall also be given to the clerk and land use board secretary of the adjoining municipality;

2. The owners of all real property, on the current tax duplicates, within 200 feet in all directions of the premises. The grantor shall be solely responsible to pay for, and obtain, a certified list of property owners in accordance with N.J.S.A. 40:55D-12c.; and

3. The county planning board, if the premises is located adjacent to a county road.

(h) The notice provided by the grantor pursuant to (g) above shall include the following: the type of waiver sought in the application, a complete description of the project, the conservation measures set forth in the proposed stewardship conservation plan, the conservation measures set forth in the forest stewardship plan, if applicable, the reason(s) necessitating the application, that comments on the application may be provided to, and that copies of the application materials can be obtained from, the Committee at: State Agriculture Development Committee, PO Box 330, Trenton, NJ 08625-0330, and [sadc@ag.nj.gov](mailto:sadc@ag.nj.gov).

(i) The application shall include, but not be limited to, the following information, as applicable:

1. A detailed narrative that includes all the following:

- i. The agricultural purpose of the project;
- ii. A description of the physical attributes of the proposed project, including location, type and characteristics of proposed disturbance, and the materials to be utilized or placed on the land;
- iii. The economic impact of the project to the farm operation;
- iv. An alternatives analysis demonstrating that alternate designs, locations, and/or rehabilitation of other areas for the project are infeasible;

(c) A description of any potential physical impacts of the proposed project upon the premises and any contiguous properties;

- vi. A description of the existing land use(s) on the premises adjacent to the proposed disturbance area and any potential impacts of the proposed project on those land uses; and
  - vii. A description of the conservation measures set forth in the proposed stewardship conservation plan and forest stewardship plan;
2. If the waiver request relates to the construction of agricultural structures, all necessary information relevant to support the request including, but not limited to, zoning, building and development plans, site plans, relevant permits, and, if applicable, stormwater management plans and calculations;
  3. A site map, or copy of the most recent soil disturbance map established pursuant to N.J.A.C. 2:76-25.10 for the premises, clearly depicting the extent and type of both existing disturbance and the proposed new disturbance with a tabulation of total combined disturbances;
  4. A copy of the stewardship conservation plan;
  5. A maintenance plan for all resource management practices necessary to comply with the waiver, if applicable;
  6. A copy of the forest stewardship plan, if applicable; and
  7. Any additional information that the grantee or Committee determines is reasonable and necessary to evaluate whether the waiver request meets the requirements of this section.
- (j) Application review and approval shall be as follows:
1. In determining whether to grant an application for a waiver satisfying the requirements at (b), (c), and (d) or (e) above, consideration shall be given to the extent to which the grantor's actions or inaction caused or contributed to the need to submit a request for a waiver;

2. In calculating the permissible waiver limit, acreage shall be rounded to three decimal places (0.000);
3. If a county or a qualified tax-exempt nonprofit organization is the grantee of the development easement, any approval of a waiver pursuant to this section must be jointly authorized by the grantee and the Committee;
4. The grantee and Committee shall prepare resolutions approving, conditionally approving, or denying the waiver request. The resolution shall include, but not be limited to:
  - i. A description of the proposed waiver activity;
  - ii. A description of conservation measures set forth in the proposed stewardship conservation plan;
  - iii. A map locating all existing soil disturbance, proposed disturbance areas subject to the waiver request, proposed conservation measures set forth in the proposed stewardship conservation plan, and exempt activities on the premises, including the limit of disturbance area;
  - iv. Area calculations of all existing soil disturbance, proposed disturbance areas subject to the waiver request, proposed conservation measures and exempt activities proposed on the premises;
  - v. Any conditions specific to the waiver activity; and
  - vi. The reasons for approval, conditional approval, or denial of the waiver; and
5. The Committee resolution shall be recorded with the Office of the County Clerk, and a copy of the recorded document shall be provided to the grantor, and if applicable, to the grantee.

(k) No disturbance associated with an approved waiver may occur until:

1. The grantor has implemented all required engineering practices, if applicable, as defined in the FOTG that are planned for year one of the stewardship conservation plan;
  2. The grantor is on or ahead of schedule with implementation of all other practices prescribed in the stewardship conservation plan;
  3. The forest stewardship plan has been approved by the New Jersey Forest Service and the grantor is on schedule with all prescribed management activities; and
  4. The grantor obtains and complies with all required permits and approvals.
- (l) Waiver(s) granted pursuant to this section may be revoked at any time by the Committee if the grantor fails to maintain compliance with all conditions of waiver approval, the deed of easement, or this subchapter. If a waiver is revoked, the limit of disturbance area shall be rehabilitated in accordance with N.J.A.C. 2:76-25.9 and 25A.9.

#### 2:76-25.7 Aggregation and consolidation

- (a) The soil disturbance allocation allowed pursuant to N.J.A.C. 2:76-25.5 may, upon joint approval, if applicable, of the grantee and the Committee, be aggregated on contiguous premises owned by the same grantor provided the total disturbance acreage does not exceed the combined individual allocations for each premises comprising the contiguous premises.
1. The decision set forth at (a) above shall be memorialized by resolution of the grantee, if applicable, and the Committee setting forth detailed findings of fact and conclusions of law.
  2. The grantee shall provide the grantor and Committee with a copy of its decision to approve, approve with conditions, or deny the application.
    - i. The grantee shall provide the Committee with a copy of the grantee's decision within 10 days of the issuance of the decision.

3. The Committee shall approve, approve with conditions, or deny the request for aggregation within 60 days of receipt of the grantee's approval.

- i. Such time period may be extended by the Committee for good cause or with the consent of the grantor.
- ii. The Committee shall provide the grantor and grantee with a copy of its decision to approve, approve with conditions, or deny the application.

4. Decisions by the Committee and by the grantee, as applicable, shall be memorialized by resolution, and decisions by the Committee shall be considered final administrative agency action subject to the right of appeal to the Appellate Division of the Superior Court.

(b) No aggregation between contiguous premises shall be permitted unless those premises are restricted, such that each premise is permanently associated with, and shall not be conveyed separate and apart from each other, except as provided at (d) below. The further division of aggregated parcels is prohibited.

(c) In the event the Committee approves an aggregation and consolidation in compliance with this section, the Committee shall prepare a document reflecting the reallocation of the permitted disturbance and prohibiting further division of the respective premises in the future. The document shall be recorded with the county clerk, and a copy of the recorded document shall be provided to the grantor and, if applicable, to the grantee.

(d) The Committee may, upon a showing of reasonable cause, approve the disaggregation of parcels as permitted in this section.

1. The approval shall require that the soil disturbance limitation for each disaggregated premises not exceed that set forth at N.J.A.C. 2:76-25.5.

(e) The Committee may require such other reasonable terms and conditions in granting approval.



#### 2:76-25.8 Division of the premises

- (a) Each parcel resulting from a division of the premises approved by the Committee pursuant to N.J.A.C. 2:76-6.15(a)15 must comply with the soil disturbance limitation prescribed at N.J.A.C. 2:76-25.5 at the time of division.
- (b) The soil disturbance limitation prescribed at N.J.A.C. 2:76-25.5 and disturbance associated with production waiver eligibility prescribed at N.J.A.C. 2:76-25.6(a)1 shall be allocated proportionally to each of the parcels resulting from a division of premises pursuant to N.J.A.C. 2:76-6.15(a)15.
- (c) In the event the Committee approves a division of the premises, the Committee shall prepare a document reflecting the division and the allocation of the allowable soil disturbance on the respective premises. The document shall be recorded with the county clerk, and a copy of the recorded document shall be provided to the grantor and, if applicable, to the grantee.
- (d) In no event shall an increase in the total soil disturbance limitation prescribed at N.J.A.C. 2:76-25.5 result from a division of the premises.

#### 2:76-25.9 Soil rehabilitation application and certification procedures

- (a) A grantor may complete a certified soil rehabilitation project pursuant to this section and N.J.A.C. 2:76-25A.9 for purposes of rehabilitating disturbed soils, so that they no longer count towards the soil disturbance limit established pursuant to N.J.A.C. 2:76-25.5.
- (b) The Committee shall have the discretion to reduce, and/or determine, the non-applicability of rehabilitation plan components set forth at N.J.A.C. 2:76-25A.9.

1. Reduction of the components at N.J.A.C. 2:76-25A.9 shall be based on relevant, site-specific conditions of the premises including, but not limited to, soil type and the nature and duration of the disturbance.
  2. The Committee may develop templates for rehabilitation of common soil disturbances that may be followed to meet the requirements at N.J.A.C. 2:76-25A.9.
- (c) Prior to commencing any proposed rehabilitation activities, the grantor shall submit a rehabilitation application and plan (application package) to the Committee consistent with this subchapter and with the soil rehabilitation standards set forth at N.J.A.C. 2:76-25A.9.
- (d) The Committee shall, within 60 days of receipt of the application package, notify the grantor whether the application package is administratively complete.
1. If the application package is determined administratively incomplete, the grantor shall be notified, in writing, with a summary of deficiencies.
  2. If the application package is determined administratively complete, the Committee shall commence a technical review of the rehabilitation plan.
  3. The Committee shall provide written notice to the grantee, if applicable, when the Committee has deemed an application for rehabilitation complete and provide an opportunity for the grantee to provide comments on the proposed rehabilitation plan.
- (e) The rehabilitation plan technical review period shall be 90 days.
1. If the Committee determines portions of the rehabilitation plan are missing technical information necessary to complete a technical review:
    - i. The grantor shall be notified, in writing;
    - ii. The review period shall be paused pending submission of any requested information;
    - iii. The grantor shall have 30 days to supply the requested information;

- iv. Acceptance of the submitted information shall restart the review period; and
  - v. Failure to submit the documentation within the timeframe shall be considered a withdrawal of the application package.
2. If the Committee determines that the rehabilitation plan does not meet the soil rehabilitation standards set forth at N.J.A.C. 2:76-25A.9, the Committee shall provide a written denial letter to the grantor stating the reason(s) for the denial. The grantor may request a hearing before the Committee for any such denial in accordance with N.J.A.C. 2:76-25.12(a) within 30 days of receipt of the denial.
  3. If the Committee determines the rehabilitation plan meets the soil rehabilitation standards set forth at N.J.A.C. 2:76-25A.9, the Committee shall provide written notice advising the grantor and grantee that the grantor may commence the rehabilitation process. Notice shall be by certified mail, return receipt requested. The grantor shall commence the rehabilitation project within 12 months of receipt of the notice to commence.
- (f) The Committee may extend the application review timeframes listed above with appropriate justification. Notice of all such extensions shall be, in writing, to the grantor. Failure by the Committee to act upon an application package within the review period(s) shall constitute approval of the rehabilitation plan.
- (g) If the rehabilitation plan is approved, the grantor shall complete rehabilitation in accordance with the approved rehabilitation sequence.
1. The grantor shall notify the Committee of intent to commence the rehabilitation plan, and each step in the rehabilitation sequence, at least five business days prior to start of physical work.

2. The Committee shall inspect each step in the rehabilitation sequence within five business days of notice thereto. The grantor shall obtain interim certification of the previous step from the Committee prior to commencing the subsequent step.
  - i. If interim certification is not obtained, the grantor shall have not more than one year to meet the standards of that step or the rehabilitation plan shall be considered unsuccessful.
    - (1) Not more than one extension of not more than one year shall be approved per step.
    - (2) Not more than two extensions shall be approved per rehabilitation plan.
  - ii. If interim certification is obtained, the grantor shall retain the documentation for final certification and shall proceed with the rehabilitation sequence.
3. The Committee, in its discretion, may require an inspection of the premises before, during, or after rehabilitation to determine compliance with rehabilitation criteria.
4. The Committee may conduct an inspection of the site and may collect soil samples or other relevant site information to determine if rehabilitation was conducted according to the rehabilitation criteria.
5. The Committee reserves the right to issue a stop-work order upon evidence of work being undertaken that violates the approved rehabilitation plan.
6. Upon completion of all rehabilitation activities, the grantor shall submit a final certification report in accordance with N.J.A.C. 2:76-25A.9(d).
  - i. The Committee shall complete an administrative review within 60 days of receipt of the final report.

- ii. The Committee shall schedule a site visit and review all submitted materials for technical completeness.
- iii. If the Committee determines rehabilitation was not completed according to the approved rehabilitation plan, the Committee shall notify the grantor, in writing, of deficiencies and recommend corrective measures to bring the rehabilitation area into compliance with the standards within the timelines described at N.J.A.C. 2:76-25A.9.
- iv. If the Committee determines that the rehabilitation work is still deficient after all stated timelines have passed, a resolution shall be issued denying the certification of rehabilitation, and the land area subject to the deficient rehabilitation work will continue to be counted towards the soil disturbance limitations set forth at N.J.A.C. 2:76-25.5.
- v. If the Committee determines that rehabilitation has been completed according to the approved rehabilitation plan, the Committee shall issue a final certification that all soil rehabilitation standards at N.J.A.C. 2:76-25A.9 have been satisfied. A resolution memorializing the certification shall be issued and the rehabilitated land area will no longer be counted towards the soil disturbance limitations set forth at N.J.A.C. 2:76-25.5.

#### 2:76-25.10 Soil protection mapping and monitoring requirements

- (a) A baseline soil disturbance map of each premises shall be established by the Committee as of July 1, 2023.
- (b) Written notice of the baseline soil disturbance map shall be provided by the Committee to the grantor by regular mail to the grantor's last known address. The Committee shall provide a copy of the baseline soil disturbance map to the grantee, if applicable.

1. If the mailing is returned as unclaimed or undeliverable, then the Committee shall make good faith efforts to provide an alternate manner of notice.
2. The written notice shall include the baseline map and a link to the Committee's website connecting to an online version of the baseline map depicting the extent and classification of identified soil disturbance features on the premises.
3. The written notice shall include a statement that the grantor and/or grantee may request reconsideration of the calculated extent or assigned classification of baseline soil disturbance map features, in writing, to the Committee in accordance with N.J.A.C. 2:76-25.12(a).
4. The written notice shall include a statement specifying that any grantor seeking to qualify for an additional two percent or one acre of soil disturbance on the premises pursuant to N.J.A.C. 2:76-25.5(b), and who wishes to dispute the baseline soil disturbance map issued by the Committee pursuant to this section, shall submit, in writing, a request for reconsideration of the calculated extent or assigned classification of soil disturbance features contained in the baseline map by (60 days of the effective date of these new rules), and in accordance with N.J.A.C. 2:76-25.12(a).

(c) A grantor seeking to qualify for approval of an additional two percent or one acre of soil disturbance on the premises pursuant to N.J.A.C. 2:76-25.5(b), and who wishes to dispute the baseline soil disturbance map issued by the Committee pursuant to this section, shall submit a written request for mapping reconsideration of the calculated extent or assigned classification of soil disturbance features contained in the baseline map by (60 days of the effective date of these new rules) and in accordance with N.J.A.C. 2:76-25.12(a). Failure to submit a request for mapping reconsideration by the date specified in this subsection will constitute grantor's consent to the soil disturbance baseline mapping for the premises.

- (d) All other grantors and grantees may submit to the Committee a written request for mapping reconsideration of the calculated extent or assigned classification of soil disturbance reflected on the then-current soil disturbance map features at any time.
- (e) Upon receipt of a written request for reconsideration, Committee staff shall conduct a site visit, as necessary, in order to ascertain the accuracy of the current soil disturbance map for the premises.
1. Within 60 days of the site visit, the Committee staff shall solicit comments and information from the grantor and the grantee that may inform the evaluation of the soil disturbance mapping.
  2. Within 120 days of receipt of the request for reconsideration, the Executive Director of the Committee shall issue a final, updated soil disturbance map for the premises to the grantor and the grantee.
  3. Any grantor and/or grantee who disagree(s) with the revised soil disturbance calculation issued by the Executive Director of the Committee may request a hearing before the Committee and the Committee will issue a final decision.
- (f) Review of soil disturbance mapping shall occur regularly as part of the monitoring of each premises required in accordance with applicable Committee rules, or upon request of the grantee.
1. The current version of soil disturbance mapping shall be available to the grantor and/or grantee at any time, upon written request.
  2. Any increase in identified, or proposed, soil disturbance of two acres or more shall be identified in the annual monitoring report submitted to the Committee by the grantee.
  3. For farms within 75 percent of the soil disturbance limit established pursuant to N.J.A.C. 2:76-25.5, all newly identified actual or proposed soil disturbances must be reported to the Committee by the grantee within 60 days of identification.

(g) For farms within 50 percent of the soil disturbance limit established at N.J.A.C. 2:76-25.5, the grantee shall include the following documentation as part of its annual monitoring report submission to the Committee:

1. Description of newly identified or amended disturbances characterized by type, location, and size (in square feet (sq./ft.)), as follows:
  - i. Soil disturbance types set forth at N.J.A.C. 2:76-25.3:
    - (1) Altered soil;
    - (2) Surfaced soil; and/or
    - (3) Compacted soil;
  - ii. Property location identified by tax block and lot number and general description (for example, Northeast corner of Block A, Lot X) and with georeferencing, using latitude and longitude, being preferred;
  - iii. Size measured coarsely using basic field tools, including, but not limited to, tape measures, pacing, or hand-held Global Positioning System (GPS) units, with GPS measurements being preferred. Vegetative cover shall be measured in accordance with N.J.A.C. 2:76-25A.6; and
  - iv. For areas where classification of soil disturbance is unclear, such as with soil alteration (cut/fill), minimum vegetative cover, or exemptions, the monitor shall err on the side of including the potential disturbance, and additional follow-up may be required to more accurately quantify disturbance areas with more precise tools;
2. Photos of each new disturbance shall be taken and provided to the Committee in digital format; and
3. Any additional information that the Committee determines is reasonable and necessary.



- (h) The Committee reserves the right to inspect all farms that have received Committee approval of an additional soil disturbance allocation pursuant to N.J.A.C. 2:76-25.5(b) and/or of a waiver request pursuant to N.J.A.C. 2:76-25.6, as needed, to determine ongoing compliance with such approvals.

#### 2:76-25.11 Enforcement

The grantee and/or the Committee, upon a finding that the owner of the premises has violated this subchapter, may pursue remedies available at N.J.S.A. 4:1C-33 and the deed of easement pursuant to N.J.A.C. 2:76-6.15.

#### 2:76-25.12 Reconsideration and hearings requests

(a) Requests for reconsideration and for hearings shall be, in writing, and addressed to: State Agriculture Development Committee, PO Box, 330, Trenton, NJ 08625-0330.

(b) All hearings by the Committee and a grantee that is a county in connection with applicable provisions at N.J.A.C. 2:76-24.5 through 25.10 shall be held in accordance with the Senator Byron M. Baer Open Public Meetings Act, N.J.S.A. 10:4-6 et seq.

#### 2:76-25.13 Committee action and decision

(a) The Committee may delegate to its Executive Director, by resolution, any action of the Committee required pursuant to this subchapter, except for a hearing as set forth at (b) below.

(b) Any applicant aggrieved by the decision of the Executive Director shall be entitled to a hearing before the Committee.

(c) Nothing in this section shall preclude the Executive Director from bringing any application or request of any kind before the Committee for review and approval, when such action is deemed appropriate by the Executive Director.

(d) A final decision by the Committee shall be considered final administrative agency action subject to the right of appeal to the Appellate Division of the Superior Court.

#### 2:76-25.14 Severability

Should any section, subsection, sentence, clause, phrase, or term of this subchapter be declared void, invalid, illegal, or unenforceable, for any reason, by the adjudication of any court or other tribunal having jurisdiction, such a declaration shall not affect the validity of the remaining provisions, which are hereby declared to be severable and which shall continue to remain in full force and effect.

### SUBCHAPTER 25A. SUPPLEMENTAL SOIL DISTURBANCE STANDARDS

#### 2:76-25A.1 Applicability

This subchapter applies to premises subject to farmland preservation deed restrictions recorded pursuant to the Agriculture Retention and Development Act, P.L. 1983, c. 32 (N.J.S.A. 4:1C-11 et seq.).

#### 2:76-25A.2 Purpose

The purpose of this subchapter is to promulgate technical standards necessary for waivers and soil rehabilitation as set forth at N.J.A.C. 2:76-25.

## 2:76-25A.3 Definitions

The following words and terms, as used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

“Avoid-control-trap system” means a system for preventing pollution from sediment, nutrients, bacteria, and pesticides (pollutants) that prioritizes avoiding the introduction of pollutants into the environment, controlling the risks from the unavoidable introduction of pollutants, and utilizing best management practices to trap pollutants close to their source to avoid their spread.

“Basal cover” means the portion of the soil surface covered by the base of plants. It does not include foliar cover (the vertical projection of exposed leaf area) or canopy cover (the vertical projection of the outermost perimeter of natural spread of foliage).

“Bulk density” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Coarse mulch” means wood chip mulch consisting of shredded leaves, bark, and wood particles ranging from one to four inches in length, with at least 50 percent of the mulch having a length of two inches or greater.

“Constrained slopes” means any slopes equal to or greater than five percent as measured over a minimum run of 10 feet.

“Dense vegetative cover” means more than 90 percent live vegetative cover over a topsoil stockpile year-round.

“Farm conservation plan” has the same meaning as that term is defined at N.J.A.C. 2:76-2A.7.

“Farm management unit” has the same meaning as that term is defined at N.J.A.C. 2:76-2.1.

“Forest land” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Highly erodible land” means land that can erode at excessive rates as determined by the NRCS.

“Limit of disturbance” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Low ground pressure equipment” means construction and/or agricultural equipment specifically designed to distribute the weight of the equipment over a larger area to reduce soil compaction, typically with tracks or other design features. Examples include a tracked excavator, tracked skid steer, or wide tracked tractor.

“Low intensity topsoil stockpile” means an option for stockpiling topsoil designed in accordance with N.J.A.C. 2:76-25A.5.

“Maximum dry bulk density” means the maximum bulk density measured in grams per cubic centimeter as set forth at N.J.A.C. 2:76-25A.5.

“Minimum rooting depth” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Minimum vegetative cover” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Moderate intensity topsoil stockpile” means an option for stockpiling topsoil from which hay may be harvested pursuant to N.J.A.C. 2:76-25A.5.

“On-farm utilities” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Premises” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Prime farmlands” has the same meaning as that term is defined at N.J.A.C. 2:76-24.3.

“Production waiver” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Soil compaction” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Soil disturbance” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Soil horizon” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Soil loss tolerance rate,” or “T,” means the maximum rate of annual soil loss that will permit crop productivity to be sustained economically and indefinitely on a given soil as defined in the USDA-

NRCS Soil Survey Manual, issued March 2017, with Minor Amendments 2018, at:

[https://www.nrcs.usda.gov/wps/PA\\_NRCSCConsumption/download?cid=nrcseprd1333016&ext=pdf](https://www.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=nrcseprd1333016&ext=pdf).

“Soil profile” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Soil structure” means the arrangement of soil particles into aggregates that form cohesive and distinct structural units.

“Soil survey report” means a report generated from the NRCS Web Soil Survey that includes maps showing the distribution of soil mapping units throughout a particular geographic area, together with narrative descriptions of the soil series shown and other information relating to the uses and properties of the various soil series.

"Solar energy" has the same meaning as that term is defined at N.J.A.C. 2:76-24.3.

"Solar energy facilities" has the same meaning as that term is defined at N.J.A.C. 2:76-24.3.

“Solar panels” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Solar-related disturbance area” means the total contiguous or noncontiguous area(s) supporting the solar energy facilities and related infrastructure. The total area calculation shall include all areas of land that are devoted to or support the solar energy facilities; any areas of land no longer available for agricultural or horticultural production due to the presence of the solar energy facilities; and any areas of the farm used for underground piping or wiring to transmit solar energy or heat where the piping or wiring is less than three feet from the surface. A solar-related disturbance area does not include building-mounted solar energy facilities.

“Step-point method” means the quantitative means of determining minimum vegetative cover pursuant to N.J.A.C. 2:76-25A.6.

“Stockpile” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Subsoil” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Topsoil” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Topsoil stockpile” has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

"USDA" has the same meaning as that term is defined at N.J.A.C. 2:76-25.3.

“Vegetated filter strip” means a grassed filter area that meets or exceeds the requirements in the conservation practice standard for filter strips at ([https://efotg.sc.egov.usda.gov/api/CPSFile/13129/393\\_NJ\\_CPS\\_Filter\\_Strip\\_2017](https://efotg.sc.egov.usda.gov/api/CPSFile/13129/393_NJ_CPS_Filter_Strip_2017)) to reduce excess sediment in surface waters and dissolved contaminants, suspended solids, and associated contaminants in runoff.

#### 2:76-25A.4 On-farm utilities construction

(a) In order for on-farm utilities to be considered exempt pursuant to N.J.A.C. 2:76-25.4, the grantor shall meet the criteria listed at (b), (c), and (d) below, as applicable.

(b) On-farm utilities general construction criteria are as follows:

1. Construction activities shall be completed while soil moisture is significantly below field moisture capacity;
2. Low ground pressure equipment and/or ground protection mats shall be used during construction to reduce soil compaction. Gravel construction roads and unprotected construction roads are counted towards the soil disturbance limitation set forth at N.J.A.C. 2:76-25.5 and shall adhere to the requirements at N.J.A.C. 2:76-25.9 and 25A.9 after construction is complete;
3. No mechanical or structural soil compaction (for example, with a sheep-foot compactor or vibratory compactor) shall occur prior to or during installation;
4. Topography shall not be altered as part of utility construction;

5. After construction is complete, bare soil over, under, and around the utility shall be seeded to a permanent vegetative cover that is compliant with the “Permanent Vegetative Cover for Soil Stabilization” standards at N.J.A.C. 2:90-1.3(a)1, or compliant with a farm conservation plan approved by the soil conservation district; and
6. Soil loss from the utility area shall be maintained at or below the soil loss tolerance rate “T.”

(c) Additional criteria for buried utility construction are as follows:

1. All underground utilities (electric, sewer, water, gas, communication lines, or similar) shall be buried below the minimum rooting depth, or compliant with the depths required by building code or other relevant regulations, if greater.
  - i. To the maximum extent practicable, underground utilities shall be buried using a trenching machine or by horizontal directional drilling.
  - ii. Horizontal directional drilling may be utilized below the minimum rooting depth. Any soil disturbance remaining on the surface of the ground as a result of horizontal directional drilling shall be rehabilitated in compliance with N.J.A.C. 2:76-25.9 and 25A.9.
  - iii. If use of a trenching machine or horizontal directional drilling is not feasible, an open (excavated) ditch may be used and should be the minimum width necessary to install the utility. The following conditions apply when underground utilities are installed using an open ditch:
    - (1) Topsoil and subsoil shall be staged separately from each other and stored in accordance with N.J.A.C. 2:76-25A.5;
    - (2) Topsoil shall not be used as bedding beneath buried utility infrastructure; and

(3) After installation, topsoil shall be replaced to an equivalent depth as existed before installation. Excess subsoil may be removed from the premises or reused on-site in compliance with an approved farm conservation plan.

(d) Additional criteria for solar energy facility construction are as follows:

1. The solar energy facility must be approved pursuant to N.J.A.C. 2:76-24 prior to commencement of construction.
2. Solar energy facilities shall be designed in a manner to minimize the solar-related disturbance area.
3. The land within the solar-related disturbance area may be utilized for crop production, pasture/grazing, or other soil-based agriculture when part of an approved farm conservation plan.
4. Solar-related disturbance areas that maintain minimum vegetative cover shall not count toward the soil disturbance limitation at N.J.A.C. 2:76-25.5.
5. Travel lanes used solely to access the solar energy facility do not qualify for the unimproved travel lane exemption pursuant to N.J.A.C. 2:76-25.4.
6. Maintenance shall be as follows:
  - i. Minimum vegetative cover shall be maintained over the entire solar-related disturbance area to minimize runoff and soil erosion;
  - ii. The solar energy facility shall be kept in good working order; and
  - iii. Land beneath non-functioning solar panels does not qualify for soil disturbance exemptions at N.J.A.C. 2:76-25.4.

7. Removal shall be as follows:



i. At the end of the solar energy facilities' useful life, all associated infrastructure shall be removed from the soil and properly disposed of. All permanent footings, concrete structures, conduits, and underground utilities shall be removed to a minimum depth of 36 inches. Infrastructure buried deeper than 36 inches may be left in place.

ii. The entire solar-related disturbance area shall comply with the rehabilitation standards pursuant to N.J.A.C. 2:76-25.9 and 25A.9 once the infrastructure has been removed.

8. Nothing in this section shall be interpreted to abrogate, supersede, or replace solar energy generation laws and rules applicable to preserved farmland.

#### 2:76-25A.5 Topsoil stockpiling

(a) General performance criteria are as follows:

1. Topsoil stockpiles shall not be located in regulated areas such as wetlands, waters of the State, floodplains, or wetland transition areas.
2. Topsoil stockpiles shall be oriented to allow drainage around the stockpile, to keep the topsoil well drained and aerobic, and to avoid ponding water around the soil.
3. Topsoil movement shall only take place when soils on the site are significantly below field moisture capacity to minimize soil compaction.
4. Topsoil shall be removed and placed using low ground pressure equipment unless work is done from ground protection mats or existing travel lanes.
5. The area to be stripped of topsoil:
  - i. Shall have existing vegetation removed by harvesting, mowing, or treating with herbicide according to the manufacturer's label; and
  - ii. Shall not be tilled before excavating topsoil to maintain the soil structure.

6. Bulky vegetation (for example, mulch, corn stover, excessive grass) shall not be incorporated into topsoil stockpiles but shall be harvested or otherwise removed.
7. When moving, handling, and grading topsoil, care shall be taken to avoid overhandling and compaction.
  - i. Topsoil shall not be moved using any equipment that substantially reduces soil aggregate structure, increases soil compaction, or leads to excessive soil smearing.
  - ii. When possible, the topsoil shall be placed directly onto the final stockpile location or shall be placed directly into a vehicle to be transported to the stockpile location.
8. Topsoil stockpile placement shall avoid overlying prime farmlands, when feasible.
9. Topsoil shall be managed in a way to maintain its soil structure to the maximum extent practicable (for example, avoid deliberately pulverizing soil clods).
10. Care shall be taken to avoid soil smearing; if the soil is smeared during construction, soil shall be scarified to allow for water and air infiltration and exchange.
11. Topsoil stockpiles shall be maintained to be free of woody vegetation unless specifically permitted in this subchapter.
12. Topsoil stockpiles shall be created as either low intensity topsoil stockpiles or moderate intensity topsoil stockpiles, depending on the goals of the farming operation, as described in this section.
  13. If equipment travel over the topsoil stockpile is necessary for construction or maintenance of the stockpile, travel shall be limited to the minimum number of passes

required. Travel shall not increase soil dry bulk density above the values listed in the following

Soil Type/Texture	Bulk Density (g/cc)
Coarse, Medium and Fine Sands and Loamy Sands	1.80
Very Fine Sand and Loamy Very Fine Sand	1.77
Sandy Loam	1.75
Loam, Sandy Clay Loam	1.70
Clay Loam	1.65
Sandy Clay	1.60
Silt, Silt Loam	1.55
Silty Clay Loam	1.50
Silty Clay	1.45
Clay	1.40

table:

(b) Performance criteria for low intensity and moderate intensity topsoil stockpiles are as follows:

1. Low intensity topsoil stockpile areas cover a smaller area than moderate intensity topsoil piles but do not grow a harvestable crop. For low intensity topsoil stockpile areas:
  - i. Existing vegetation shall be removed before placement of topsoil fill.
  - ii. The existing topsoil shall be tilled or ripped to eliminate any transition zone between the existing topsoil and the topsoil stockpile to be placed on the area.
  - iii. Topsoil shall be stockpiled to a maximum height of three feet above original grade.
  - iv. The side-slopes of the topsoil stockpile shall be no greater than 4 horizontal:1 vertical (25 percent) to reduce erosion potential and allow for routine mowing.
  - v. When topsoil is planned to be stockpiled for more than 30 days it shall be seeded and mulched in compliance with the “Permanent Vegetative Cover for Soil Stabilization” standards, or the “Temporary Vegetative Cover for Soil Stabilization” standards, at N.J.A.C. 2:90-1.3(a)1, depending on the purpose and nature of the stockpile; and
2. Moderate intensity topsoil stockpile areas are lower in height than low intensity stockpiles, and cover more land area, but may be cropped with hay. For moderate intensity topsoil stockpile areas:

- i. All vegetation shall be removed prior to placement of topsoil fill;
- ii. The existing topsoil shall be tilled or ripped to eliminate any transition zone between the existing topsoil and the topsoil stockpile to be placed on the area;
- iii. Topsoil shall be placed at a depth of not less than 12 inches and not more than 18 inches;
- iv. Side slopes shall be no greater than 6 horizontal: 1 vertical (17 percent);
- v. Seeding shall be an appropriate long-term, deep rooting perennial hay crop within 30 days; and
- vi. During establishment, no harvesting shall occur until the crop has reached a sufficient height to ensure vigorous, deep root establishment.

(c) Maintenance of topsoil stockpiles shall be as follows:

1. Agronomic nutrient testing of the surface of the topsoil stockpile shall be completed as soon as the stockpile is constructed. Appropriate amendments shall be added to the soil to establish and maintain dense vegetative cover as recommended by the soil test results;
2. Dense vegetative cover shall be established and maintained on the topsoil stockpiles within 30 days of final soil placement and grading. Topsoil stockpiles shall be reseeded, as necessary, to maintain dense vegetative cover. There shall be no tillage of topsoil stockpiles after initial establishment, except as expressly provided in this subchapter;
3. Permanent vegetation on low intensity soil stockpiles shall be mowed no lower than six inches and shall be maintained free of woody vegetation, unless otherwise specified in this subchapter. Equipment travel over the stockpiles shall be minimized and shall only occur when the stockpile is significantly below field moisture capacity;

4. Permanent vegetation on moderate intensity soil stockpiles shall be mowed or harvested not less than four inches and shall be allowed to regrow at least 12 inches prior to subsequent harvests. Care shall be taken to avoid excessive equipment traffic over the topsoil stockpile. Hay bales shall not be stockpiled on the soil stockpile and shall not be removed from the field unless the ground is significantly below field moisture capacity or the ground is frozen;
5. Tillage may occur on moderate intensity topsoil stockpiles to establish a hay crop not more than once every five years. Seeding or overseeding of hay crops may occur at any frequency necessary to maintain the hay;
6. Trees, shrubs, and woody vegetation shall not be planted or be allowed to establish on topsoil stockpiles unless specifically approved by resolution of the Committee. Nursery stock shall not be established on topsoil stockpiles;
7. Signage shall be maintained on each topsoil stockpile preventing improper use. Topsoil stockpiles shall not be used for picnic areas, parking, travel, pasture or other livestock use, growing crops, filling depressions or containers, or any other use unless specifically provided for in this subchapter; and
8. All erosion rills that form on the stockpile shall be addressed promptly by stabilization with seed and mulch or biodegradable erosion control matting, if necessary, for vegetation to establish.

#### 2:76-25A.6 Vegetative cover

- (a) Temporary parking areas and temporary storage areas are exempt agricultural practices pursuant to N.J.A.C. 2:76-25.4 when minimum vegetative cover as defined at N.J.A.C. 2:76-25.3 is maintained.

(b) The Committee recognizes that there may be circumstances beyond the reasonable control of the grantor affecting the grantor's ability to maintain minimum vegetative cover including, but not limited to, the type of soil present or extended weather conditions. The Committee and grantee, as appropriate, shall consider the following factors affecting the quality of vegetation and the ability of a field to maintain minimum vegetative cover in determining whether these areas shall be considered exempt agricultural practices:

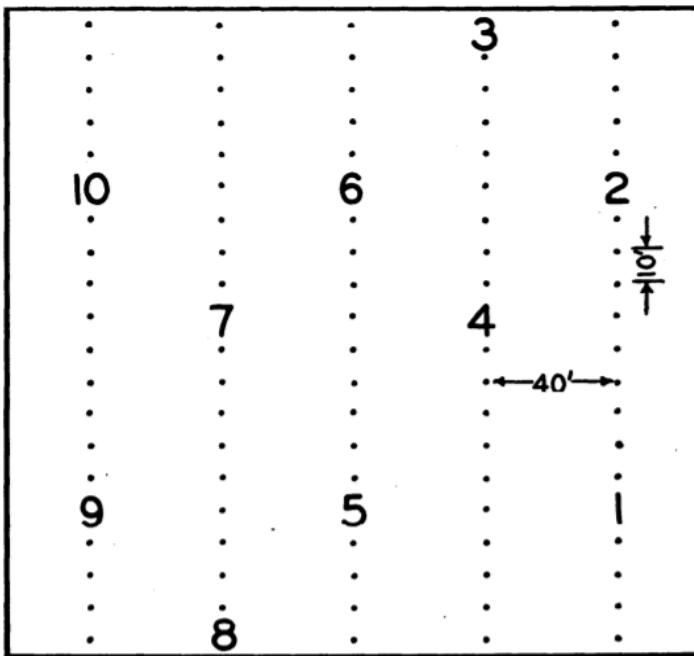
1. The weight of the equipment or vehicles that traverse the vegetative cover;
2. The frequency of use of the area each day or season;
3. The yield potential of the pasture;
4. Pasture management (that is, mowing, irrigating, fertilizing, seeding, and pasture rotation);
5. Plant species present;
6. Drainage;
7. Soil type; and
8. Weather conditions and season.

(c) The following method shall be used to measure vegetative cover:

1. Delineate land use area by physical breaks (for example, fences, roads, hedge rows) and/or by visible evidence of soil degradation captured from a drone, aerial imagery, other remote sensing device, or in-person observation.
  - i. Measurement areas within a land use area to be sampled shall be grouped by soil type and topography.
    - (1) Each measurement area shall have uniform vegetative cover to avoid undercounting degraded areas.

- (2) Each measurement area shall be contiguous (a single polygon, instead of multiple parts).
  - (3) Measurement areas shall not exceed one-acre.
  - (4) The minimum measurement of vegetative cover shall be 0.1-acre.
- ii. Sampling results shall be reported separately for each measurement area.
2. Measurement areas shall be sampled at a frequency of 100 points per acre using the following methodology:
- i. Establish five equally spaced transects of 20 equally spaced points;
  - ii. For smaller areas, proportionally reduce the number of points, not the spacing;
  - iii. To the maximum extent practicable, utilize a pre-determined transect design with points spaced 10 feet apart and rows spaced 40 feet apart (see figure below);
  - iv. Pace or measure to each sampling location and look at the land cover touching the middle of the boot tip. Alternatively, a measuring tape or pre-measured rope with knots may be used;
  - v. Record land cover at each sampling location on a chart or spreadsheet as “vegetation,” “weed,” “crop residue,” “bare ground,” or “other” (rocks, wood); and
  - vi. A leaf hanging over bare soil shall be marked as bare soil;
3. The step-point method is used to estimate basal cover of grass and is not a method to estimate vegetative cover beneath trees.
4. Tally points in each land cover category and divide by the total points collected in that measurement area; measurement areas with more than 70 points per acre (70 percent) of

“vegetation” and/or “crop residue” are not considered disturbed soil.



• Step-point

3 Frame-point and step-point

2:76-25A.7 Construction standards for expedited production waivers

(a) A project proposed for an expedited production waiver shall meet all the criteria at (b) through (g) below, as applicable.

(b) The following criteria shall apply to all projects seeking to utilize expedited waiver construction standards:

1. No soil disturbance shall be planned:

i. Within wetlands or other regulated areas;

ii. In areas with karst topography, shallow depth to bedrock, organic soils, Highly Erodible Land designation, or acid producing soils, pursuant to a soil survey report or identified by NRCS;



iii. On any constrained slopes; or

iv. In forest land;

2. Disturbed areas shall be minimized while meeting the agronomic needs;
3. No deliberate mechanical soil compaction (for example, with a sheep-foot compactor or vibratory compactor, or similar) shall occur on the disturbed area;
4. Low ground pressure equipment and/or ground protection mats shall be used during construction on exposed soil;
5. No disturbance shall occur within the dripline of any wooded area, tree, or perennial crop outside the limit of disturbance;
6. At no time shall the topsoil be removed from the premises or mixed with the underlying subsoil;
7. All subsoil shall remain on the premises;
8. Preparation of proposed soil disturbance areas shall only occur when soil moisture within the limit of disturbance is at or below field capacity to avoid excessive rutting, mixing of topsoil and subsoil, and to minimize compaction; and
9. Soil disturbance activities shall not commence unless and until a waiver has been approved by the grantee and the Committee.

(c) The following maintenance requirements shall apply to all projects seeking to utilize construction standards for expedited production waivers:

1. Erosion occurring within or downslope of the disturbed area shall be stabilized promptly. If erosion occurs repeatedly within or adjacent to a disturbed area, additional conservation measures shall be adopted and implemented that meet the planning criteria; and
2. Topsoil stockpiles shall be maintained according to N.J.A.C. 2:76-25A.5.

(d) When a proposed project will cause soil compaction as defined at N.J.A.C. 2:76-25.3, all the following criteria shall apply:

1. Compacted areas shall not have soil alteration or soil surfacing;
2. No topsoil or subsoil shall be removed or moved for the construction or use of the compacted area;
3. Coarse organic mulch and/or ground protection mats shall be utilized when practical; and
4. The grantor shall plant and maintain a vegetated filter strip downstream of the compacted area.
  - i. Additional vegetated filter strips shall be planned at an interval within the compacted area necessary to prevent concentrated flow erosion.
  - ii. Vegetated filter strips shall be maintained until the compacted area is rehabilitated.

(e) When a proposed project will utilize ground-level surfaces, as defined at N.J.A.C. 2:76-25.3, all the following criteria shall apply:

1. Prior to construction of the ground-level surface, topsoil shall be removed, stockpiled, and stabilized pursuant to N.J.A.C. 2:76-25A.5;
2. Surfaced areas which require additional grading are considered soil alteration and shall also follow the criteria for altered soils at (g) below;
3. Surfaced areas shall be underlain with a suitable permeable woven or non-woven geotextile fabric to prevent base or surface material from becoming embedded into native soil while allowing water infiltration.
  - i. Fabric shall extend sufficiently beyond the ground-level surface to ensure native soil/surface material separation;
  - ii. The fabric shall be installed according to manufacturer's guidelines; and

iii. Additional layers of pressure-distributing material may be added;

4. At least six inches of appropriate permeable subbase shall be installed to properly distribute loads into the subsoil; and

5. Additional surfacing above the subbase:

i. May be added as necessary for the agricultural operation;

ii. Shall have an infiltration rate greater than or equal to the porosity of the underlying native soil;

iii. May include gravel, crushed concrete, cinders, shells, sand, soil, pavers, bricks, or blocks;

iv. Appropriate edging shall be installed around the perimeter of the facility to limit movement of material off the facility into the neighboring soil;

v. On-site topsoil shall not be used as a surface; and

vi. Shall not include poured concrete, asphalt, asphalt millings, porous asphalt, or porous concrete. If those surfaces are necessary, the design shall follow the low impact disturbance design criteria pursuant to N.J.A.C. 2:76-25A.8.

(f) When a proposed project will utilize suspended surfaces, as defined at N.J.A.C. 2:76-25.3, all the following criteria shall apply:

1. Rooftop runoff shall be managed using gutters or other management system to capture water for future use, infiltrate water to groundwater, and/or delay the timing of runoff to reduce the impact of the runoff;

2. A stormwater management plan and design shall be obtained for any required stormwater management facilities; and

3. For the land beneath the suspended surface:

- i. The criteria for ground-level surfaces at (e) above shall be followed;
- ii. The soil shall be protected with ground protection mats; or
- iii. The soil shall be protected with coarse mulch of at least three inches.

(g) Where soil alteration, as defined at N.J.A.C. 2:76-25.3, is proposed, all the following criteria shall apply:

- 1. Prior to construction, topsoil shall be removed, stockpiled, and stabilized pursuant to N.J.A.C. 2:76-25A.5;
- 2. Grading shall only occur within the B soil horizon (the first soil horizon below the topsoil);
- 3. No grading shall go into lower soil horizons or bedrock;
- 4. All subsoil shall stay on-site, either stockpiled or as part of fill for the project.

i. Subsoil stockpiles shall be stabilized with temporary control measures to prevent soil loss due to wind and water erosion;

- 5. Exposed soil shall be permanently vegetated or otherwise stabilized within the first growing season;

- 6. For fill piles, including organic material, soil amendments, construction materials, or long-term subsoil piles:

i. The volume of material to be piled onsite shall be commensurate with the volume of material needed for an agricultural purpose on the grantor's farm management unit, using a nutrient management plan or other applicable NRCS conservation practices; and

ii. All imported material shall be free of asphalt, concrete, stone, other rubble, or other undesirable characteristics, as determined by the Committee; and

7. For organic fill piles, including mulch, compost, wood chips, manure, livestock bedding, and leaves, a vegetated filter shall be planted and maintained around the fill area. The vegetated filter strip shall be maintained until the fill area is rehabilitated.

(h) If a deviation from the standards in this section is necessary, the grantor shall follow the low impact disturbance design criteria pursuant to N.J.A.C. 2:76-25A.8.

#### 2:76-25A.8 Low impact disturbance design criteria

(a) For a project to be eligible for a production waiver, the grantor shall describe how the proposed project addresses all the low impact disturbance design criteria described below:

1. Topsoil shall be stockpiled pursuant to N.J.A.C. 2:76-25A.5;
2. The following criteria for soil shall, to the maximum extent practicable, be adhered to:
  - i. Protect the existing soil profile, by minimizing, including cuts, fills, and excavations;
  - ii. Maintain soil physical properties such as soil texture, consistency, and structure;
  - iii. Maintain soil chemical properties;
  - iv. Maintain the natural contour of the land;
  - v. Retain the existing subsoil depth and thickness;
  - vi. Keep the soil profile free of gravel, foreign material, and debris;
  - vii. Keep the bulk density within appropriate levels for plant growth; and
  - viii. Support practices that maintain organic matter content;
3. The following criteria for water shall, to the maximum extent practicable, be adhered to:
  - i. Design to maintain existing topography;
  - ii. Prioritize nutrient management in an avoid-control-trap system;
  - iii. Prioritize long-term maintenance of water management systems;

- iv. Avoid concentrating flows;
  - v. Avoid creating or disturbing constrained slopes;
  - vi. Employ practices that maintain or increase the infiltration rate of water;
  - vii. Protect flow through natural drainage areas;
  - viii. Minimize impermeable surfaces; and
  - ix. Forest land shall be maintained; and
4. The project design and accompanying narrative for the waiver application shall be completed and certified by a technical service provider, professional engineer, NRCS-certified conservation planner, or other Committee-approved conservation professional.

#### 2:76-25A.9 Soil rehabilitation plan requirements

- (a) The purpose of this section is to establish the minimum application, plan, and certification requirements for a rehabilitation plan to be certified by the Committee as a soil rehabilitation project pursuant to N.J.A.C. 2:76-25.9.
- (b) A rehabilitation application and plan shall be prepared in accordance with application documents developed by the Committee.
- (c) The rehabilitation plan shall meet or exceed the criteria identified below:
  - 1. General criteria applicable to all rehabilitation plans:
    - i. All rehabilitation activities shall be completed while the soil moisture is sufficiently below field moisture capacity to avoid rutting of and damage to soil structure.
    - ii. Soil rehabilitation activities shall be timed for completion at the onset of the optimal seeding period to minimize the duration and area of exposure of bare soil to erosion.

- iii. Vegetative cover shall be established in accordance with the specified cover crop mixture or crop rotation immediately after rehabilitation activities.
  - iv. Low ground-pressure equipment and/or ground protection mats shall be used during rehabilitation activities.
  - v. The following soil physical properties shall approximate or be more favorable for plant growth after soil rehabilitation than pre-disturbance conditions:
    - (1) Surface infiltration rate;
    - (2) Hydraulic conductivity;
    - (3) Texture;
    - (4) Structure;
    - (5) Porosity (for example, bulk density);
    - (6) Consistency;
    - (7) Penetration resistance; and
    - (8) The reaction (pH) and other chemical properties of the major horizons of the rehabilitated soil must be within the ranges of the pre-disturbed soil or be similar to, or as favorable for, plant growth.
  - vi. The depth and quality of the rooting zone of the rehabilitated soil shall be equal to or greater than the pre-disturbance soil rooting zone or the rooting zone of a similar reference site if pre-disturbance rooting zone depth is unknown.
2. Additional criteria applicable to the removal of surfaces or structures are as follows:
- i. All structures, surfaces, and associated foreign materials and debris, including buried infrastructure, shall be removed in their entirety within the soil profile as provided in the rehabilitation plan. Buried infrastructure below parent material may remain in place.

- ii. Demolished structures and surfaces shall be removed from the premises for disposal, reuse, or recycling, or may be retained on the premises for beneficial reuse if approved in the rehabilitation plan.
  - iii. Removal of gravel or other surfacing shall be completed in a manner that minimizes gravel mixing with soil and compaction of the soil. The removal equipment shall remain on the gravel or ground protection mats during the rehabilitation process.
  - iv. After removal of surfaces or structures, human-made or processed artifacts (for example, concrete, glass, brick, gravel) in each horizon shall be less than five percent by volume of the soil profile.
3. Additional criteria applicable to modified topography and soil profile reconstruction are as follows:
- i. Rehabilitated areas shall be consistent with the pre-disturbance contour of the land, and any rehabilitated slope shall be within one percent of the pre-disturbance slope.
  - ii. Final grading of the reconstructed soil shall provide for adequate surface drainage.
  - iii. The minimum depth of soil and/or substitute soil material to be reconstructed shall be 48 inches; or another depth, if deemed necessary or appropriate by the Committee, to restore the pre-disturbance soil productivity.
4. Additional criteria applicable to subsoil replacement and/or grading:
- i. Subsoil shall be replaced at the same depth and thickness of the undisturbed soil or a similar reference site if the original depth and thickness are unknown.
  - ii. If importation of subsoil is necessary for rehabilitation, certified clean subsoil shall be utilized and records retained for submission with the final certification report, as described at (d)1 through 7 below.



- iii. Replacement subsoil shall have similar physical characteristics to the native subsoil unless the grantor can demonstrate using soil with similar physical characteristics will prohibit rehabilitation (for example, excessive clay content).
  - iv. Subsoil shall be tested for bulk density according to the additional criteria for soil bulk density and decompaction testing set forth at (c)6 below.
  - v. Subsoil shall be placed in lifts of not more than six inches and excessive voids shall be removed prior to placement of additional subsoil.
  - vi. Subsoil shall be scarified before placing additional subsoil or topsoil layers, and any reconstructed soil horizons shall be deep-tilled with appropriate implements to ensure root penetration and that restrictive layers do not limit downward water percolation.
5. Additional criteria related to topsoil replacement and/or grading are as follows:
- i. Replacement topsoil shall be applied to the remediation area to a depth not less than that of the pre-disturbed soil, accounting for soil settling.
  - ii. Topsoil shall not be removed from undisturbed portions of the farm to be utilized for rehabilitation.
  - iii. Replacement topsoil utilized shall be sourced, in order of preference, from:
    - (1) An on-site topsoil stockpile, if topsoil was stockpiled prior to disturbance;
    - (2) An off-premises topsoil source; and
    - (3) Vendor supplying substitute soil material, provided the applicant submits a written justification that is approved by the Committee.
  - iv. Replacement topsoil shall have similar soil properties as the pre-existing soil as identified in the application package.

- (1) Replacement topsoil shall be friable, loamy, with similar coarse fragment content to the original topsoil, free of debris, objectionable weeds and stones, and contain no toxic substance or adverse chemical or physical condition that may be harmful to plant growth. In all cases, topsoil shall have not more than 15 percent coarse rock fragments greater than one inch in size.
- (2) Replacement topsoil shall have an organic matter content greater than or equal to that of the pre-existing topsoil.
  - (A) Organic matter content may be increased by additives not explicitly prohibited by the deed of easement. Paper-mill byproducts, sludge, biosolids, and other waste products shall not be permitted as soil amendments without the Committee's written approval and as part of a farm conservation plan.
  - (B) Manure may be incorporated into the soil as part of a manure management plan or farm conservation plan.

v. Prior to applying replacement topsoil:

- (1) Complete the additional criteria for bulk density testing and decompaction within the subsoil as set forth at (c)6 below.
- (2) Scarify the subsoil surface to ensure root penetration and that restrictive layers do not limit downward water percolation.

vi. When placing replacement topsoil:

- (1) Soil handling shall be limited to the minimum necessary for replacement to maintain soil structure.
- (2) Place additional topsoil to allow for settling so the final depth of replacement topsoil is equivalent to or greater than pre-disturbance conditions.

vii. After final topsoil replacement, the grantor shall complete the:

- (1) Additional criteria for bulk density testing and decompaction, set forth at (c)6 below;
- (2) Additional criteria for soil testing and amendments, set forth at (c)7 below; and
- (3) Additional criteria for crop yield comparisons, set forth at (c)8 below.

6. Additional criteria for bulk density testing and decompaction are as follows:

i. Test the soil in at least five locations per acre at the minimum rooting depth and at the surface for excessive compaction using the soil test methods described in this section.

ii. Rehabilitated soils shall have bulk density values less than or equal to bulk density values in an undisturbed reference location and not more than those listed in the table at N.J.A.C. 2:76-25A.5(a)13.

iii. Soil test methods shall be selected from the handheld soil penetrometer test method, tube bulk density test method, or nuclear density test method described in the Land Grading standards at N.J.A.C. 2:90-1.3(a)2.

iv. If soil is determined to be above the maximum bulk density after testing, the soil shall be tilled or scarified to the depth of compaction or the minimum rooting depth, whichever is less, using a chisel plow, subsoiler, or other similar equipment. Vegetative measures designed to loosen the soil (forage radish, cover crops) may be utilized alone or in conjunction with other mechanized methods.

v. After decompaction, the soil density shall be retested at least at the minimum rooting depth, the subsoil surface, and the topsoil surface until compaction has been rehabilitated. The Committee may require additional bulk density sampling within the soil profile for especially compacted soils.

7. Additional criteria for soil testing and soil amendments are as follows:

- i. Collect topsoil samples after all grading, soil replacement, and decompaction has been completed. Collect five to 10 representative topsoil samples across each rehabilitation area

to create a composite mixture for testing at a rate of at least one soil test per disturbance within the rehabilitation area, but not less than one sample per three acres.

ii. Soil sample collection shall follow laboratory standards.

(1) For rehabilitation projects where no topsoil was imported from off-site, the soil shall be tested utilizing the New Jersey Agriculture Experiment Station's Full Farm Test, or equivalent, including nutrients, pH, estimated cation exchange capacity (CEC) and cation saturation, plant-available (inorganic) nitrogen, and organic matter content.

(2) For rehabilitation projects where topsoil was imported from off-site or substitute soil material was created, the New Jersey Agriculture Experiment Station's Topsoil Specification Test, Ecological Research Test, and/or Compost/Technical Test, or equivalent, may be required based on site-specific conditions.

(3) The Committee reserves the right to require any additional soil tests, as is necessary, to prove the quality of imported topsoil or substitute soil material.

iii. Amendments shall be applied according to soil test results and recommendations from a Rutgers Cooperative Extension agent or similarly qualified agronomist or soil scientist.

iv. Soil organic matter within the rehabilitation area shall be amended until organic matter content within the rehabilitation area is equal to pre-existing conditions or that of the surrounding farm fields if pre-existing levels are unknown.

v. Topsoil shall be tilled to incorporate all necessary fertilizers and amendments using a large offset disk, rototiller, chisel plow or similar equipment, then seeded with a fast-growing cover crop until the next crop is planted.

vi. Once soil amendment is completed, follow additional criteria for crop yield comparisons, as set forth at (c)8 below.

8. Additional criteria for crop yield comparisons are as follows:
- i. Establish a baseline for comparison using one or more of the following methods:
    - (1) Pre-recorded crop yields from not more than five years prior to the date of rehabilitation, with farming practices enumerated.
    - (2) Parallel crop yields from another field farm with the same soil type and under equivalent management practices (irrigation, fertilizer application, seed type, tillage).
    - (3) If pre-recorded or parallel crop yields are not feasible, county yield values from the soil survey report as defined at N.J.A.C. 2:76-25.3 may be permitted at the discretion of the Committee.
  - ii. Determine post-rehabilitation crop yield:
    - (1) Develop and implement a planned cropping rotation for measuring crop yield.  
Acceptable crops for yield comparison testing may include row crops, such as corn or soybeans or small grains, but shall not include vegetables, tree fruit, or hay, unless approved, in writing, by the Committee.
    - (2) Crop yield shall be measured at harvest utilizing a standardized protocol developed by the grantor in the application package and approved, in writing, by the Committee.
    - (3) Crop production shall be measured for at least five years after all other rehabilitation standards have been met and certified.
    - (4) For sites where parallel crop yield comparison is not possible, adjustment for weather-induced variability in the annual crop production may be permitted by the Committee for not more than two of the five crop yield measurements.
  - iii. Crop yield testing shall be considered successful when the five-year averaged yield is not less than 90 percent of the pre-recorded crop yields or county values, or when the parallel crop

yields are not less than 90 percent of the yields in the control fields for three of the five testing years.

- iv. Crop yields that fail to meet the minimum rehabilitation thresholds after 10 years will be considered unsuccessful and the land will continue to be counted towards the soil disturbance limitations set forth at N.J.A.C. 2:76-25.5.

(d) After rehabilitation activities and testing have been completed, the grantor shall submit to the Committee and the grantee, a final certification report which, at a minimum, shall include:

1. Records of interim certifications for each step in the approved rehabilitation sequence;
2. A comparison of the pre-existing and rehabilitated soil properties;
3. Documentation of acceptable bulk density tests with a map depicting the approximate location of the tests, and date(s) of testing;
4. Certification of clean fill, including source of soil, if applicable;
5. Results of soil tests, including quantity and type of amendments applied;
6. Crop yield comparisons, farming practices, and sampling pattern and locations; and
7. An as-built survey showing slopes, if grading occurred.

#### 2:76-25A.10 Severability

Should any section, subsection, sentence, clause, phrase, or term of this subchapter be declared void, invalid, illegal, or unenforceable, for any reason, by the adjudication of any court or other tribunal having jurisdiction, such a declaration shall not affect the validity of the remaining provisions, which are hereby declared to be severable and which shall continue to remain in full force and effect.