New Jersey Department of Agriculture Soil Erosion and Sediment Control Program Frequently Asked Questions for the Implementation of the New Jersey Soil Restoration Act P.L. 2010, Chapter 113 and the New Jersey Standards for Soil Erosion and Sediment Control

1. What is the Soil Restoration Act and how does it affect NJ Soil Conservation District Permitting?

The Act, adopted in 2010, required the Department through the State Soil Conservation Committee to develop new erosion control practices for mitigating soil compaction on constructions sites which are regulated by the NJ Soil Erosion and Sediment Control Act (N.J.S.A. 4:24-39 et seq.). The Department has achieved this through the modification of its existing erosion control standards which are implemented through each of the State's 15 Soil Conservation Districts.

2. What are these changes?

The Standards for <u>Topsoiling</u> and <u>Land Grading</u> include new and revised requirements to mitigate the potential damage from soil compaction. General changes include but are not limited to: 5 inches of topsoil required (no longer just recommended), and a requirement to either proactively de-compact the subsoil or test subsoil for compaction. If the testing indicates subsoil compaction, the subsoil shall be de-compacted to a depth of 6 inches prior to the application of topsoil.

3. Are there any exemptions to these requirements?

Yes. The Land Grading Standard includes several categories of industry specific designs which are exempt. Examples of these designs include but are not limited to: golf courses, athletic fields, landfills or landfill caps, structural soils, industrial remediation sites and areas where increased infiltration is not desirable such as around building foundations or over septic fields. The Standard also establishes that a minimum contiguous area of 500 square feet or less is exempt from testing or remediation.

4. How do I know which areas of my site are subject to soil compaction mitigation?

All areas within the proposed limits of disturbance but are outside any building foot print buffer or other excluded area (i.e. septic fields) must be graphically depicted on the erosion control plan (or alternatively, a plan entitled "soil compaction mitigation plan") which is then certified by the local Soil Conservation District.

5. How do I know where to take my soil compaction tests?

Test locations must be depicted on the erosion control / mitigation plan at the time of plan review and certification. Locations are to be set at an interval of at least one test per ½ acre for projects 1 acre or larger. For projects less than one acre, at least two tests are required regardless of the size.

6. Is soil compaction testing mandatory?

No. Testing is allowed as an alternative to performing compaction mitigation (tilling or ripping). If $\underline{\text{subsoil}}$ pass the compaction tests noted in the Land Grading Standard, then $\underline{\text{no}}$ further mitigation is required.

7. What are these tests?

There are four tests that may be used to verify that soils are not compacted:

1. Wire Flag (survey wire) probe -6" into the subsoil without bending

- 2. Penetrometer 6" of penetration at a reading of less than 300 psi
- 3. Tube bulk density test field samples and lab analysis required
- 4. Nuclear Densitometer to be performed by individuals certified for this test. Tests 1 and 2 may be conducted by anyone authorized by the project owner and are considered a 'screening level' (pass-fail) type of test. If more precise assessments of soil compaction are desired, tests 3 and/or 4 must be performed by certified individuals (usually soil scientists, geotechnical or civil engineers) but must be certified by a N.J. licensed engineer.

8. What happens if my site does not pass these tests?

Each test is progressively more detailed so that if a low-level test is failed, the possibility exists that a more refined test may yield favorable results. If after testing is completed, and the soil density is found to be excessive (according to test parameters), then the soils in those areas of testing failure <u>must</u> be de-compacted by tilling, ripping etc. to a depth of 6 inches into the <u>subsoil</u>, prior to topsoil application.

9. How is testing and/or mitigation integrated into the District inspection process?

As the applicant, you or your designee will either perform compaction testing or mitigation and will report the results to the District on a soil compaction verification form, provided by the Department (see below). You will also need to provide a copy of your plan confirming the location of the tests or mitigation that you performed. You are required to provide this information to the District before requesting a soil erosion control inspection.

While you as the applicant must provide for testing and/or mitigation and certify the results on the official form, District inspectors will perform verification of the results reported on the form. If the inspector is unable to verify that the subsoil is sufficiently de-compacted to a depth of 6 inches (not including the topsoil layer of 5 inches), the inspection will not be approved and the subsoil must be de-compacted and re-inspected by the District before a certificate of compliance for erosion and sediment control can be issued.

10. When do these requirements take effect?

The changes to the Standards were adopted by the Department on June 12, 2017 by the State Soil Conservation Committee with an operational (effective) date of December 7, 2017. Any new plans submitted to a local Soil Conservation District on or after this date must comply with the requirements outlined above.

Please note- the testing/mitigation/inspection process will only apply to plans which have been submitted to a District on or after December 7th, 2017. Plan and inspection requirements are not retroactive to previously certified plans or plans which are in process of being reviewed by the District.

11. Where can I get a copy of these Standards and forms?

The Standards and associated forms used in the Soil Erosion and Sediment Control Program may be downloaded from the Department's website at http://www.nj.gov/agriculture/divisions/anr/nrc/njerosion.html Additional information is also available on the website such as sample soil compaction mitigation plans, plan notes etc.